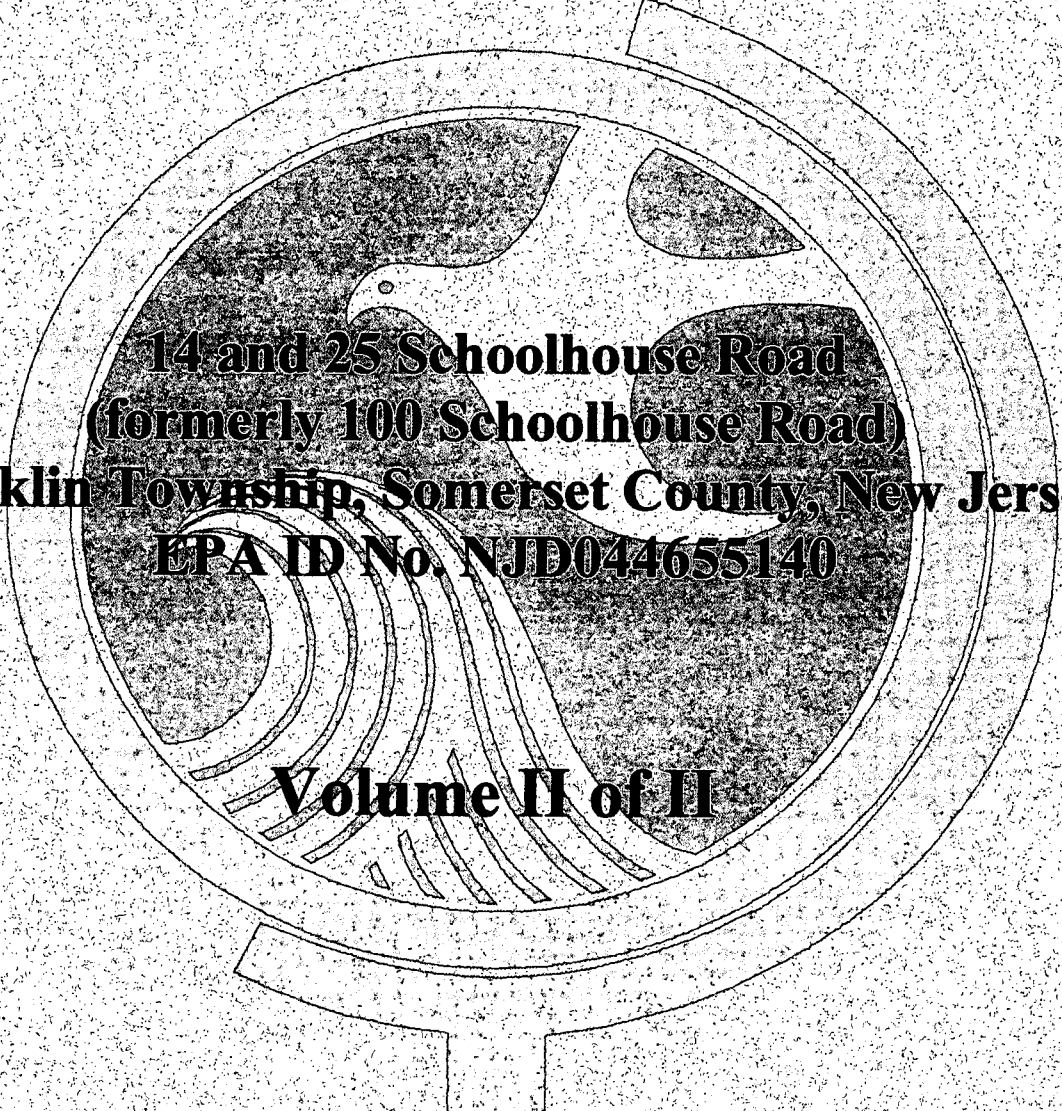


# **SITE REASSESSMENT**

## **SGS THOMSON MICRO ELECTRONICS**



**14 and 25 Schoolhouse Road  
(formerly 100 Schoolhouse Road)  
Franklin Township, Somerset County, New Jersey  
EPA ID No. NJD044655140**

**Volume II of II**

**New Jersey Department of Environmental Protection  
Site Remediation Program  
Publicly Funded Remediation Element  
Bureau of Environmental Measurements and Site Assessment**

**October 2010**

**USEPA COPY**

267062



**ATTACHMENT C**



## State of New Jersey

Christine Todd Whitman  
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.  
Commissioner

Tod Read  
Gilberg & Kurent  
1250 I Street N.W.  
Washington, D.C. 20005

SEP 12 1996

RE: Industrial Establishment: Microwave Semiconductor Corporation  
Location: 100 School House Road, Franklin Twp., Somerset County  
Blocks: 514 & 517 Lots: 20.01 & 20.01  
ISRA Case # 89560  
Transactions: Sale of Business and Property; Cessation of Operations  
Final Remedial Action Report dated: January 3, 1996  
Supplemental Information dated: April 3, 1996 & May 28, 1996

Dear Mr. Read:

Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (NJDEP) by the Industrial Site Recovery Act (ISRA), N.J.S.A. 13:1K-6 et seq., and duly delegated to the Assistant Director of the Industrial Site Evaluation Element pursuant to N.J.S.A. 13:1B-4, the proposal for no further action at the above referenced Industrial Establishment is hereby approved. This approval is based upon information provided to the NJDEP, and the NJDEP's inspection of the site.

Microwave Semiconductor Corporation shall seal all monitoring wells installed for compliance with ISRA and submit the well abandonment forms to the Bureau of Water Allocation (BWA). The well abandonment forms are to be obtained by a licensed well driller from the BWA. The BWA can be contacted at 609-292-2957. Please be advised that this case is being referred to the BWA for their review and subsequent action.

This notice will serve to release the Remediation Funding Source to Microwave Semiconductor Corporation for the Administrative Consent Order signed on October 10, 1989 and any other funds held pending compliance with ISRA.

The NJDEP is establishing a Classification Exception Area (CEA) because levels of contaminants remain above their Ground Water Quality Criteria pursuant to the Ground Water Quality Standards (N.J.A.C. 7:9-6.1 et seq.). Pursuant to N.J.A.C. 7:9-6.5, the ground water in this area is presently designated as Class II-A. The primary designated use for Class II-A ground water is potable water; secondary uses include agricultural and industrial water. Any proposed ground water use within the CEA will require NJDEP review for feasibility of well installation and modifications that would be protective of any impacts from these contaminants for the duration of the CEA.

C

This CEA is based on the aquifer classification, contaminant data, and evaluations provided in the Remedial Action Reports dated: January 3, 1996 and Supplemental Information dated: April 3, 1996 & May 28, 1996. The horizontal boundaries of the CEA are defined on the maps enclosed with the reports and are based on a lateral extent of 8.81 feet from monitor well MW-2. The vertical boundary is 80 feet below grade surface (bgs).

This CEA applies only to the contaminants listed in the table below. The ground water quality criteria for these contaminants are listed in parts per billion. All constituent standards (N.J.A.C. 7:9-6) apply at the designated boundary.

Contaminant	Ground Water Quality Criteria (ppb)
1,1-dichloroethene (1,1-DCE)	2.0
1,1,1-trichloroethane (1,1,1-TCA)	30.0

The duration of the CEA is set at seven years and 73 days. If concentrations of contaminants reach their respective ground water quality criteria prior to the CEA expiration date, Microwave Semiconductor Corporation may request that the CEA be terminated. However, the expiration of the seven year and 73 day period alone does not constitute approval to utilize the ground water within the CEA for its designated purposes (i.e. Class IIA). Compliance with the Ground Water Quality Standards must be demonstrated prior to using the ground water within the CEA for its designated purposes. Microwave Semiconductor Corporation is advised that the NJDEP's evaluation of any future ground water sampling results, to determine compliance with the Ground Water Quality Standards would be performed through a Memorandum of Agreement.

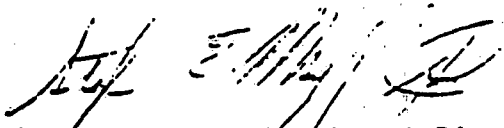
Please be advised that since this site is located in a ground water use area, confirmatory sampling at the expiration of the CEA is required. Verification that contaminant levels are in compliance with the Ground Water Quality Standards shall be based on a minimum of two rounds of ground water sampling. Microwave Semiconductor Corporation shall ensure that the time between sampling events accounts for seasonal fluctuations. The NJDEP will not terminate a CEA designation or give an unconditional "no further action" determination unless confirmatory ground water sampling indicates that compliance with the Ground Water Quality Standards have been achieved, and that primary aquifer uses can be restored within the formerly contaminated area.

Since groundwater quality data indicates exceedance of contaminants above the primary drinking water standards, and the designated uses of Class IIA aquifers include potable use, the CEA established for this site is also a Well Restriction Area. The extent of the Well Restriction Area shall coincide with the boundaries of the CEA.



This approval is limited to the above referenced transactions only and shall not restrict or prohibit the NJDEP or any other agency from taking regulatory action under any other statute, rule or regulation. By issuing this No Further Action approval letter, NJDEP continues to reserve all rights to pursue any penalties allowable under the law for violations of ISRA associated with the above referenced transactions.

Sincerely,



Wayne C. Howitz, Assistant Director  
Industrial Site Evaluation Element

c: Walter Galanowsky, Franklin Twp Health Department  
Renee Bancroft, BGWPA  
David Haymes, BGWPA  
Richard Yarsinsky, BFCM  
Rick Kropp, Bureau of Water Allocation  
Colleen Kokas, Environmental Claims Administration  
Chuck Hummewell, Siemens Corporation  
Michael Latronica, LAN Associates Inc.

ATTACHMENT D

**LUCENT TECHNOLOGIES  
SPECIALTY FIBER**

**PRELIMINARY ASSESSMENT  
REPORT**

**25 Schoolhouse Road  
ISRA Case No. E2001 0309  
and**

**19 Schoolhouse Road  
ISRA Case No. E2001 0310**

**Franklin Township  
Somerset County  
New Jersey**

**February 12, 2002**

**Prepared For:  
Lucent Technologies  
Bell Laboratories  
Room 7B-513A  
700 Mountain Road  
Murray Hill, New Jersey 07974-0636**

**Prepared By:  
GeoTrans, Inc.  
1465 Route 31 South,  
Annandale, New Jersey 08801**

D

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**LUCENT TECHNOLOGIES  
SPECIALTY FIBER**

**PRELIMINARY ASSESSMENT  
REPORT**

**25 Schoolhouse Road  
ISRA Case No. E2001 0309  
and  
19 Schoolhouse Road  
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**Franklin Township  
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GeoTrans, Inc.  
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Annandale, New Jersey 08801**

4/98

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION  
P.O. Box 435, TRENTON, NJ 08625-0435**

**PRELIMINARY ASSESSMENT REPORT**

**Answer all questions. Should you encounter any problems in completing this form, we recommend that you discuss the matter with a representative from the Site Remediation Program. Submitting incorrect or insufficient data may cause processing delays and possible postponement of your transaction**

**PLEASE PRINT OR TYPE**

**Date:** February 12, 2002

**Industrial Establishment/Site Name:** Lucent Technologies-Specialty Fiber

**Address:** 25 Schoolhouse Road (formerly known as 100 Schoolhouse Road)

**City or Town:** Somerset

**Zip Code:** 08873

**Municipality:** Franklin Twp.

**County:** Somerset

**Block:** 517.02

**Lots:** 20.01

**Latitude:** 40.5286

**Longitude:** 74.5472

**Site Remediation Program Case Number or EPA Identification Number:** 3221

*This PAR also includes the following contiguous property as part of the above-referenced Industrial Establishment:*

**Industrial Establishment/Site Name:** Lucent Technologies-Optical Fiber Solutions

**Address:** 19 Schoolhouse Road

**City or Town:** Somerset

**Zip Code:** 08873

**Municipality:** Franklin Twp.

**County:** Somerset

**Block:** 517.05

**Lots:** 35.08

**Latitude:** 40.5286

**Longitude:** 74.5472

1. Present a history of ownership and operations at the industrial establishment, in tabular form, from the time the site was naturally vegetated or utilized as farmland in accordance with N.J.A.C. 7:26E-3.1(c)1.i. (attach additional sheets as necessary)

**Lot 20.01 - 25 Schoolhouse Road**

Name of Property Owner	From	To
Township of Franklin	1940s	9/12/66
Phillip I. Seltzer, et al. 752 Madison Avenue Somerset, New Jersey	9/12/66	5/22/68
Somerset Valley Properties, Inc. 752 Elizabeth Avenue Somerset, New Jersey	5/22/68	2/9/69
Micro-Val Corp. 77 North Bridge Street Somerville, New Jersey	2/9/69	1/13/76
Microwave Semiconductor Corp. 186 Wood Avenue Iselin, New Jersey	1/13/76	10/10/89
SGS Thompson Microelectronics, Inc. 211 Commerce Drive Montgomeryville, Pennsylvania	10/10/89	1997
Triple Net Investments V LP 171 Route 173, Suite 201 Asbury, New Jersey 08802	1997	present

**Lot 35.08 - 19 Schoolhouse Road**

Name of Property Owner	From	To
Township of Franklin	1940s	5/25/65
Phillip I. Seltzer, et al. 752 Madison Avenue Somerset, New Jersey	5/25/65	5/29/68
Somerset Valley Properties, Inc. 752 Elizabeth Avenue Somerset, New Jersey	5/29/68	2/16/94
Robert H. Lund, Sheriff	2/16/94	2/16/94
Schoolhouse Properties, LLC	2/16/94	5/13/98
Provident Somerset Partner LLC c/o Colliers Houston and Company Mgmt. 200 Cottontail Lane Somerset, New Jersey 08873	5/13/98	present

**Lot 20.01 - 25 Schoolhouse Road**

<b>Name of Operator</b>	<b>From</b>	<b>To</b>
Microwave Semiconductor Corporation	1969	1989
SGS Thompson Microelectronics, Inc.	1989	1997
Lucent Technologies - Specialty Fiber (John Ferguson, EH&S Manager)	1998	present

**Lot 35.08 - 19 Schoolhouse Road (Multiple tenant space - operators are listed for subject space only.  
Lucent took over portions of two previously separate spaces when they moved in.)**

<b>Name of Operator</b>	<b>From</b>	<b>To</b>
This address was not listed in the National Telephone Directory Corp.'s records prior to 1990. <sup>1</sup>		
Current owner was provided with no tenant history from previous owner at time of sale in 1998.		
AT&T Corporate Training Facility	Prior to 1998	2000
Thoroughbred Software International, Inc.	At least 1990	2000
Lucent Technologies - Optical Fiber Solutions (John Ferguson, EH&S Manager)	2000	present

<sup>1</sup> The 1990 Street Directory Listing (see Appendix F) identifies the following six businesses at 19 Schoolhouse Road: P. Carfagno; Ausimont U S A Inc.; Computerized Information Systems Corporation; Concept Omega Corp; Physical Edge Professional Fitness Center; and Thoroughbred Software.

The 2000 Street Directory Lists the following six businesses at 19 Schoolhouse Road: P. Carfagno; Computerized Information Systems Corporation; Concept Omega Corporation; Foreclosure Data; Thoroughbred Software International; and Logan Instruments.



2A. In accordance with N.J.A.C. 7:26E-3.1(c)1.ii, provide a clear and concise description of the past industrial/commercial operation(s) conducted on site by each owner and operator. To the extent available the site history shall include an evaluation of the following sources of information:

(1) Sanborn Fire Insurance Maps; (2) MacRae's Industrial Directory; (3) Title and Deed; (4) Site plans and facility as-built drawings; (5) federal, state, county and local government files; (6) The Department Geographic Information System; (7) and any additional sources which may be available for a specific site.

Provide a listing of the resources utilized to compile the site history and as appropriate copies of any maps or information, which will assist the Department in evaluating your conclusions.

Name of Resource	Date of document reviewed	Appendix # if providing copies
Site Location Map, Topo Map, Site Plans (19 & 25)	1995 to current	A
Aerial Photographs with Analysis (19& 25)	1953 through 1995	B
Photolog for 25 Schoolhouse Road	2001	C
Photolog for 19 Schoolhouse Road	2001	D
June 1997 Phase I ESA for 25 Schoolhouse Road	1997	E
VistaInfo Title History & Street Directory Summary (19)	2001	F
VistaInfo Site Assessment Report (25)	August 2001	G
Previous ISRA Documents (25 Schoolhouse Road)	1993-1996	H
NJDEP Known Contaminated Sites Report (19 & 25)	2001	I
Current NJDEP Correspondence and Narrative	2001	J
Current Permits (25 Schoolhouse Road)	2000	K
Closure Report for Acid Neutralization Vault (25)	1998	L
Additional Site Plans (19 & 25)	1997-2000	M

*Note: There is no Sanborn map coverage available for this area of Franklin Township.*

#### **Lot 20.01 - 25 Schoolhouse Road**

The subject property is located at 25 Schoolhouse Road in Franklin Township, Somerset County. It consists of a 25,000 square foot industrial facility. Since the time of its construction in 1969, the facility had housed a manufacturing operation that produced silicon microwave power semiconductors, system components and subsystems for advanced telecommunications, radar, and electronic warfare applications. Waste generated during the previous operation consisted mainly of acids and solvents. The former operations at the property ceased in August 1993, and the facility was vacant until 1998.

#### **Lot 35.08 - 19 Schoolhouse Road**

The subject property at 19 Schoolhouse Road is contiguous with the other subject property at 25 Schoolhouse Road. Aerial photographs and a city street directory list indicate that this multi-tenant building was constructed sometime between 1984 and 1990. Previous to its development, the property was a vacant, partially wooded lot. Prior use of the present area leased by Lucent is believed to have been exclusively office space. Most of the present leased space was most recently occupied by AT&T and used for offices supporting AT&T's former training facility next door at 17 Schoolhouse Road.

**2B. Include a detailed description of the most recent operations subject to this preliminary assessment.**

**Lot 20.01 - 25 Schoolhouse Road**

On or about January 1, 1998, Lucent Technologies leased and began manufacturing operations at 25 Schoolhouse Road. Lucent has used the 25,000 square foot facility for the manufacture of optical fiber for telecommunications applications. The manufacturing operation falls under Standard Industrial Classification (SIC) 3229, Glass Fiber Manufacturing. Since beginning operations at the facility, and as of the time of the submission of this PAR, Lucent's operations at this facility have consisted of the following:

**Modified Chemical Vapor Deposition (MCVD)**

In this operation, a thin layer of silica and metals such as germanium and aluminum were deposited on the inside of a hollow glass rod. This rod was then heated until it collapsed, essentially forming a solid rod with the deposited materials forming the inside of the rod. The rod was then placed in another hollow rod and heated to form a solid rod. This operation is called over-cladding. The operation primarily utilized gases such as hydrogen, oxygen, and chlorine. The resulting air stream was high in hydrogen chloride and was wet scrubbed utilizing caustic soda to neutralize the hydrogen chloride. This two-stage scrubber discharged water at a rate of approximately ten (10) gallons per day of operation. This wastewater stream normally had a pH range of 5 to 9, with calcium as the primary salt. Analysis indicated that levels of other metals vary from non-detectable (ND) to very low levels. Values for lead ranged from ND to 0.042 ppm, values for chromium ranged from ND to 0.0003 ppm, and values for zinc ranged from ND to 0.799 ppm. It was intended for this wastewater stream to be blended with wastewater from the testing operations described below for final polishing in the small neutralization system at the facility.

**Fiber Draw Tower**

In this operation, the finished glass rod was heated in a furnace and pulled through a die to produce a fiber optic strand. The fiber was then overcoated with a UV curable polymer. This operation does not involve any wastewater operations with the exception of non-contact cooling water from the furnace. Three gallons of non-contact cooling water were discharged approximately once per year or as needed during maintenance of the furnace.

**Testing**

Various testing procedures were performed in bench scale laboratory hoods. A number of these tests involved prep work using acids such as sulfuric acid and nitric acid. The concentrated acids were collected and sent off-site for disposal. Rinsewaters from sinks were discharged to a drain system, blended with the scrubber water discussed above, and treated in a small neutralization system. The total quantity of water from the testing operations has been approximately 30 gallons per day.

***Lot 35.08 - 19 Schoolhouse Road***

Lucent Technologies began operations at this location in the Spring of 2000 and has occupied 60,200 square feet, or approximately 70 percent, of the building since that time. At the time of the site inspection, there were three other occupants in the building. Lucent has used this leased space for staff offices and several testing labs. Additionally, the space contains facilities used for rewinding fiber products and for light assembly of electronic devices that use specialty fibers. Optical fiber is produced at the adjacent 25 Schoolhouse Road facility and is brought to the 19 Schoolhouse Road facility. The laboratories at this facility include a Laser Production Laboratory and a High Power Development Laboratory that are not actually parts of the production line. At the 19 Schoolhouse Road facility, there are no operations that produce an industrial waste stream.

3. Hazardous Substance/Waste Inventory: N.J.A.C. 7:26E-3.1(c)1.iii. List all raw materials, finished- products, formulations and hazardous substances, hazardous wastes, hazardous constituents and pollutants, including intermediates and by-products that are or were historically present on the site. Note: If past usage included farming, pesticides may be a concern and should be included in this list. (attach additional sheets if necessary).

*Lot 20.01 - 25 Schoolhouse Road*

Material Name	CAS # if known	Typical annual usage (gallons/lbs.)	Storage method (i.e. Drum, tank, jars)
Ethylene glycol	-----	220 gal	30 gal polyethylene drums
Silicon Tetrachloride	-----	15 L	10 L metal drum
Phosphoryl Chloride	-----	9 L	2.5 L glass jar
Germanium Chloride	-----	10 L	2.5 L glass jar
Hydrogen	-----	400 lbs.	Bulk steel tube tank
Nitrogen	-----	3080 gal	Bulk steel tank
Oxygen	-----	2980 gal	Bulk steel tank
Methanol	-----	75 L	4 L plastic bottle
Acetone	-----	360 L	4 L plastic bottle
Photoresist	-----	1 qt	1 qt. plastic bottle
Isopropyl	-----	5 L	4 L plastic bottle
Resist Developer	-----	1 gal	1 gal plastic bottle
Resist Primer	-----	1 gal	1 gal plastic bottle
Ceric Ammoniate Nitrate	-----	5 gal	2 gal plastic jar
Trifluoromethane	-----	1 m <sup>3</sup>	Cylinders
Chlorine	-----	8 lbs	Cylinders
Helium	-----	24,600 L	Cylinders
Fluorine	-----	4,500 L	Cylinders
Neon	-----	22,500 L	Cylinders
Xenon	-----	300 L	Cylinders
Sulfuric Acid	-----	150 gal	4 l glass bottle
Nitric Acid	-----	75 gal	500 mL glass bottles
2-Propanol	-----	10 gal	4 L plastic bottle
Ethyl Alcohol	-----	300 gal	4 L plastic bottle
Hexafluoroethane	-----	95 lbs	Cylinders
Silicon Tetrafluoride	-----	50 lbs	Cylinder
Hydrofluoric Acid	-----	10 gal	4 L plastic bottle
Hydrochloric Acid	-----	25 gal	500 mL glass bottles
Aluminum Chloride	-----	500 grams	100 g glass jar
Rare Earth Oxides & Salts	-----	1 kg	100 g glass jar
Transition Metal Salts	-----	500 grams	100 g glass jar

From Lucent's 1998 usage records

**Lot 35.08 - 19 Schoolhouse Road**

<b>Material Name</b>	<b>CAS # if known</b>	<b>Typical annual usage (gallons/lbs.)</b>	<b>Storage method (i.e. Drum, tank, jars)</b>
Methanol	-----	6 gal	4 L plastic bottle
Acetone	-----	14 gal	4 L plastic bottle
Glycerin	-----	1 gal	Glass bottle
Isopropyl	-----	14 gal	4 L plastic bottle
Ethanol	-----	1 gal	Glass bottle
Alcohol Reagent	-----	8 gal	Plastic bottles
Deuterium	-----	-----	Compressed gas tank

From Lucent's 2001 usage records

- 4 A. In accordance with N.J.A.C. 7:26E-3.1(c)iv provide a summary of all current and historic wastewater discharges of Sanitary and/or Industrial Waste and/or sanitary sludges. Present and past production processes, including dates, and their respective water use shall be identified and evaluated, including ultimate and potential discharge and disposal points and how and where materials are or were received on-site. All discharge and disposal points shall be clearly depicted on a scaled site map.

**Site Information**

Discharge Period		Discharge Type	Discharge Location
From	To		
1969	Present	Industrial waste (25 Schoolhouse)	Sanitary waste stream
1969	Present	Sanitary waste (25 Schoolhouse)	Sanitary waste stream
Late 1980s	Present	Sanitary waste (19 Schoolhouse)	Sanitary waste stream

- 4B. Provide a narrative of disposal processes for all historic and current process waste streams and disposal points.

At 25 Schoolhouse Road, during former operation (up to 1993), acid waste was pre-treated in an on-site acid neutralization vault and then discharged to the Middlesex County Utility Authority (MCUA). This acid neutralization vault was removed in 1997 (Appendix N). When operations resumed at this site in 1998, a lime chip tank was installed in the boiler room of the facility to pre-treat any acidity in the wastewater stream. All industrial and sanitary waste at the 25 Schoolhouse Road facility was discharged and still is discharged to the MCUA. The total current facility lab/industrial waste discharge stream, excluding sanitary wastewater from restrooms, is estimated at less than 60 gallons per day. No MCUA permit is required for this facility.

At the 19 Schoolhouse Road facility, there are no operations that produce an industrial waste stream. All sanitary waste goes to the MCUA. The sanitary waste stream is estimated at between 60 and 100 gallons per day. No MCUA permit is required for this facility.

5. This question requires the applicant to conduct a diligent inquiry into the current and historic operations at the site to identify all of the potential areas of concern, which formerly or currently exists at the industrial establishment as defined in N.J.A.C. 7:26E-1.8.

Diligent inquiry as defined in N.J.A.C.7:26E-1.8 states:

A. Conducting a diligent search of all documents which are reasonably likely to contain information related to the object of the inquiry, which documents are in such person's possession, custody or control, or in the possession, custody or control of any other person from whom the person conducting the search has a legal right to obtain such documents; and

B. Making reasonable inquiries of current and former employees and agents whose duties include or included any responsibility for hazardous substances, hazardous wastes, hazardous constituents, or pollutants, and any other current and former employees or agents who may have knowledge or documents relevant to the inquiry.

In accordance with N.J.A.C. 7:26E3.1(c)1.v., a narrative shall be provided for each area of environmental concern describing the (A) Type; (B) Age; (C) Dimensions of each container/area; (D) Chemical Content; (E) Volume; (F) Construction materials; (G) Location; (H) Integrity (i.e., tank test reports, description of drum storage pad); and (I) Inventory control records, unless a Department-approved leak detection system, pursuant to N.J.A.C. 7:1E or 7:14B, has always been in place and there is no discharge history. If sampling is not proposed for any identified area of environmental concern, please explain why it is believed that the area of environmental concern does not contain contaminants above the applicable remediation standards. Submit all necessary documentation to verify this belief. The required narrative need not describe the sampling to be completed; however, it should state that sampling will be completed in accordance with the appropriate section of N.J.A.C.7:26E. Detailed descriptions of all remediation activities shall be described in the site investigation report in accordance with N.J.A.C.7:26E-3.13. Note: If the industrial establishment has multiple locations for one type of area of concern (example: underground storage tanks are located in 3 separate areas of the facility), each area must be discussed separately.

I hereby certify that a diligent inquiry has been conducted to identify all current and historical potential areas of environmental concern and based on the diligent inquiry the areas of environmental concern identified below in question 5A through 5G are the only areas of environmental concern believed to exist at the above referenced industrial establishment.



**A. Bulk Storage Tanks and Appurtenances, including, without limitation :**

Narratives for each identified Area of Concern are presented either in a footnote immediately below the appropriate table or in the appendix indicated with (\*). Appendices that are not designated with (\*) provide reference material rather than narrative information.

**Lot 20.01 - 25 Schoolhouse Road**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Aboveground Storage Tanks and Associated Piping	Yes	See Site Plan in Appendix A	Appendix C* pp. 1-3
Underground Storage Tanks and Associated Piping	No <sup>25-1</sup>	--	--
Silos	No	--	--
Rail Cars	No	--	--
Loading and unloading areas	No	--	--
Piping, above ground and below ground pumping stations, sumps and pits	Yes	See Site Plan in Appendix A	Appendix C* pp. 4-6

<sup>25-1</sup> A search of NJDEP's UST and LUST databases was performed by VISTAINFO and is presented in the Site Assessment Report provided in Appendix G. The subject property was not listed in the UST or LUST databases.

**Lot 35.08 - 19 Schoolhouse Road**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Aboveground Storage Tanks and Associated Piping	No	--	--
Underground Storage Tanks and Associated Piping	No	--	--
Silos	No	--	--
Rail Cars	No	--	--
Loading and unloading areas	No	--	--
Piping, above ground and below ground pumping stations, sumps and pits	No	--	--

**B. Storage and Staging Areas, including**

***Lot 20.01 – 25 Schoolhouse Road***

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Storage pads including drum and/or waste storage	Yes <sup>25-2</sup>	--	Appendix E Appendix H
Surface impoundments and lagoons	No	--	--
Dumpsters	Yes	See Site Plan in Appendix A	Appendix C* pp. 7-8
Chemical storage cabinets or closets	Yes	Chem Lab (Room B26/B26A): See Evacuation Route Figure in Appendix A	Appendix C* pp. 9-11

<sup>25-2</sup> A former drum storage area was the subject of ECRA Case #89560. The pad was located on the east side of the Former Pole Barn at the north end of the property. Remediation efforts for this ECRA case are summarized on pages 2-3 through 2-8 of the June 1997 Phase I ESA presented as Appendix E. This case was issued an NFA determination by NJDEP with a Classification Exemption Area for groundwater specified for a small area in the northwest portion of the property (see correspondence provided in Appendix H).

Under current operations, hazardous wastes are stored in DOT-approved one- or two-gallon receptacles and stored in flammable storage cabinets in the area where the waste is generated. Once a month all hazardous wastes are consolidated at the loading dock when a hazardous waste hauler makes a pick up. The current waste hauler is Engineered Environmental, Inc. of Oldwick, NJ. A No Further Action (NFA) determination is proposed for this AOC.

**B. Storage and Staging Areas, including**  
(continued)

**Lot 35.08 - 19 Schoolhouse Road**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Storage pads including drum and/or waste storage	Yes <sup>19-1</sup>	--	--
Surface impoundments and lagoons	Yes	See Site Plan in Appendix A	Appendix D* pp. 2-3
Dumpsters	Yes	See Site Plan in Appendix A	Appendix D* p. 4
Chemical storage cabinets or closets	Yes	See Evacuation Route Figure in Appendix A	Appendix D* pp. 5-9

<sup>19-1</sup> Lab wastes are stored in either DOT-approved one- or two-gallon receptacles or in plastic bottles stored in flammable storage cabinets. These cabinets are documented under the Chemical Storage Cabinets AOC (see Appendix D, pp. 5-9). In each either case, wastes are stored in the laboratory where the waste was generated. Once a month all hazardous wastes from 19 Schoolhouse Road are consolidated at the loading dock of 25 Schoolhouse Road when Engineered Environmental (the hazardous waste hauler) makes a pick up. Based upon the small quantities involved, the careful protocols in place, and the fact that no previous releases have been reported, an NFA determination is proposed for the waste storage AOC. ok

C. Drainage systems and areas including without limitation

*Lot 20.01 - 25 Schoolhouse Road*

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Floor drains, trenches and piping and sumps	Yes <sup>25-3</sup>	throughout	Appendix M
Process area sinks and piping which receive process waste	No	--	--
Roof leaders when process operations vent to the roof	Yes	No	Appendix C* p. 12
Drainage swales & culverts	No	--	--
Storm sewer collection systems	No <sup>25-4</sup>	--	--
Storm water detention ponds and fire ponds	No	--	--
Surface water bodies	No	--	--
Septic systems leachfields or seepage pits	No	--	--
Drywells and sumps	No	--	--

<sup>25-3</sup> As confirmed on the plumbing plans provided in Appendix M, the floor drain system connects to the sanitary sewer system and, therefore, poses no threat of discharging to the environment. Accordingly, an NFA determination is proposed for this AOC.

<sup>25-4</sup> All stormwater discharges to the ground surface. A copy of a NJPDES permit is provided in Appendix K.

C. **Drainage systems and areas including without limitation**  
(continued)

**Lot 35.08 - 19 Schoolhouse Road**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Floor drains, trenches and piping and sumps	Yes	In Boiler Room: See Evacuation Route Figure in Appendix A	Appendix D* p. 10
Process area sinks and piping which receive process waste	Yes	In Fiber Coloring Room: See Evacuation Route Figure in Appendix A	Appendix D* p. 11
Roof leaders when process operations vent to the roof	Yes	No	Appendix D* p. 12
Drainage swales & culverts	No	--	--
Storm sewer collection systems	Yes <sup>19-2</sup>	See Site Plan in Appendix A	--
Storm water detention ponds and fire ponds	No	--	--
Surface water bodies	No	--	--
Septic systems leachfields or seepage pits	No	--	--
Drywells and sumps	No	--	--

<sup>19-2</sup> Based upon the site inspection, the storm sewer collection system consists of six stormwater catch basins. Their locations are depicted on the Site Plan in Appendix A. Roof leaders also appear to discharge into the storm sewer collection system. The storm sewer collection system drains into the stormwater retention basin (addressed as a separate AOC) located at the north end of the subject property. No staining or evidence of discharges into these six catch basins was observed during the site inspection. There are no reports of any discharges or spills into these six catch basins, and no staining was observed around the catch basins during the site inspection. Therefore, an NFA determination is proposed for the storm sewer collection system AOC.

**D. Discharge and disposal areas, including, without limitation:**

***Lot 20.01 - 25 Schoolhouse Road***

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Areas of discharge per N.J.A.C. 7:1E	No	--	--
Waste piles as defined by N.J.A.C 7:26	No	--	--
Waste water collection systems including septic systems, seepage pits, & dry wells.	No	--	--
Landfills or landfarms	No	--	--
Sprayfields	No	--	--
Incinerators	No	--	--
Historic Fill or any other Fill material	No	--	--
Open Pipe discharges	No	--	--

***Lot 35.08 - 19 Schoolhouse Road***

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Areas of discharge per N.J.A.C. 7:1E	No	--	--
Waste piles as defined by N.J.A.C 7:26	No	--	--
Waste water collection systems including septic systems, seepage pits, & dry wells.	No	--	--
Landfills or landfarms	No	--	--
Sprayfields	No	--	--
Incinerators	No	--	--
Historic Fill or any other Fill material	No	--	--
Open Pipe discharges	No	--	--

**E. Other areas of concern, including, without limitation:**

***Lot 20.01 - 25 Schoolhouse Road***

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Electrical Transformers & Capacitors	Yes	See Site Plan in Appendix A	Appendix C* p. 13
Hazardous material storage or handling areas	No	--	--
Waste Treatment areas	No	--	--
Discolored or spill areas	No	--	--
Open areas away from production areas	No	--	--
Areas of stressed vegetation	No	--	--
Underground piping including industrial process sewers	No	--	--
Compressor vent discharges	No	--	--
Non-contact cooling water discharges	No	--	--
Areas which receive flood or storm water from potentially contaminated areas	No	--	--
Active or Inactive production wells	No	--	--



**E. Other areas of concern, including, without limitation:**  
(continued)

***Lot 35.08 - 19 Schoolhouse Road***

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Electrical Transformers & Capacitors	Yes	See Site Plan in Appendix A	Appendix D* p. 13
Hazardous material storage or handling areas	No	--	--
Waste Treatment areas	No	--	--
Discolored or spill areas	No	--	--
Open areas away from production areas	No	--	--
Areas of stressed vegetation	No	--	--
Underground piping including industrial process sewers	No	--	--
Compressor vent discharges	Yes	See Site Plan in Appendix A	Appendix D* p. 14
Non-contact cooling water discharges	No	--	--
Areas which receive flood or storm water from potentially contaminated areas	No	--	--
Active or Inactive production wells	No	--	--

**F. Building interior areas with a potential for discharge to the environment, including, without limitation:**

***Lot 20.01 – 25 Schoolhouse Road***

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Loading or Transfer areas	Yes	See Site Plan in Appendix A	Appendix C* p. 14-15
Waste Treatment areas	No	--	--
Boiler rooms	No	--	--
Air vents and ducts	No	--	--
Hazardous material storage or handling areas	No	--	--

**F. Building interior areas with a potential for discharge to the environment, including, without limitation:**  
(continued)

***Lot 35.08 - 19 Schoolhouse Road***

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Loading or Transfer areas	Yes	See Site Plan in Appendix A	Appendix D* pp. 15-16
Waste Treatment areas	No	--	--
Boiler rooms	No <sup>19-3</sup>	See Site Plan in Appendix A	--
Air vents and ducts	No	--	--
Hazardous material storage or handling areas	No <sup>19-4</sup>	Fiber Coloring Room: See Evacuation Route Figure in Appendix A	--

<sup>19-3</sup> The boiler room doors open directly to the building's exterior at ground level, with a relatively low metal threshold at the opening. However, there has historically been at least one floor drain in the boiler room, and it is connected to the sanitary sewer system. There have been no hazardous processes or hazardous materials known to have been stored in the boiler room. Therefore, the boiler room is not proposed as an AOC. ou

<sup>19-4</sup> The Fiber Coloring Room has a door that opens to the outside on the east side of the building. Only small quantities of chemicals are stored and used in this room (see Photograph 11 on page 11 of Appendix D). Discharge to the environment is highly unlikely due to the small quantities of chemicals used in this area. Therefore, the Fiber Coloring Room is not proposed as an AOC. u

**G. Any other site-specific area of concern.**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
None	--	--	--

- 6 If the site area exceeds two acres, an interpretation of the aerial photographic history of the site shall be submitted in accordance with N.J.A.C. 7:26E-3.1(c)1.vi. The interpretation shall be based on available current and historical color, black and white and infrared aerial photographs (scale 1:18,000 or less) of the site and surrounding area at a frequency that provides the evaluator with a historical perspective of site activities. The photographic history shall date back to 1932 or the earliest photograph available. Aerial photographs are available for review at the New Jersey Department of Environmental Protection, Tidelands Management Program, Aerial Photo Library, 9 Ewing Street, Trenton, New Jersey, (609) 633-7369. Note, the applicant is not required to provide the Department with copies of the aerial photographs reviewed only an interpretation of what was observed in each photograph, which may represent an environmental concern.

**Provide the appendix number for the air photo review narratives:**

Appendix B

**7. Discharge History of Hazardous Substances and Wastes, N.J.A.C. 7:26E-3.1(c)1vii:**

**A. Have there been any known discharges of hazardous substances and wastes at the site?**

**No (Go to question #8)**

**Yes (Complete Items 7B & 7C)**

**No - 19 Schoolhouse Road**

**Yes - 25 Schoolhouse Road**

Neither the VISTAINFO Site Assessment Report (Appendix G) nor the NJDEP Known Contaminated Sites Report (Appendix I) identified any historic discharges at the 19 Schoolhouse Road facility.

**B. Was the Department notified of the discharge?**

**Yes**

**If yes, provide the Case # ISRA 89560 and 93446; ECRA 91759**

In Appendix I, only the 25 Schoolhouse Road site (formerly known as 100 Schoolhouse Road) was identified in the NJDEP's Known Contaminated Sites Database. Case E89560 is listed as closed with a CEA restriction. In Appendix J, a narrative is provided outlining attempts to obtain more detailed ISRA and ECRA records from NJDEP. To date, NJDEP has not been able to provide documentation of the ISRA and ECRA cases indicated above.

**C. Was a no-further-action letter, negative-declaration approval or full-compliance letter issued as a result of the cleanup of this discharge?**

**Yes (Submit a copy of the no-further-action approval)**

**Yes - See Appendix H**

**No (Submit a complete Site Investigation or Remedial Action Report documenting the action taken to address the discharge)**

**8 In accordance with N.J.A.C.7:26E-3.1 (c) 1.vii, provide a description of any remediation activities previously conducted or currently underway at the site, including dates of discharges, remedial actions taken, and all existing sample results concerning contaminants which remain at the site. Copies of Department or other governmental agency no-further-action approvals should also be provided with a description of the areas to which the no-further-action approvals apply. This information is especially important if the approval was granted for the remediation of a portion of a site or a specific discharge event rather than the entire site subject to this preliminary assessment.**

See Appendix H. A No Further Action (NFA) was issued for the industrial establishment at 25 Schoolhouse Road regarding ISRA case # 89560. The NFA involved a Classification Exemption Area for groundwater at the site.

9.

Protectiveness of past remedies, Order of Magnitude Analysis, N.J.A.C. 7:26E-3.1(c) 1.ix & N.J.A.C. 7:26E, 3.2(a)5:

- A. Have any areas of concern previously received a No-Further-Action approval from the Department or other equivalent government agency for which no additional remediation is proposed?

No (go to question #10).     X     Yes (complete 9B).

- B. In accordance with N.J.S.A 58:10B-13(e) the following evaluation of the protectiveness of past remedies shall be completed for all areas of concern for which no further action was previously approved by the Department or other equivalent government agency and for which no additional remediation is proposed. All final sampling results shall be evaluated to determine if contaminant levels remaining on site are in compliance with current remediation criteria.

The contaminants of concern, as stated in the NJDEP's NFA approval letter dated 9/12/96, are 1, 1-dichloroethene (1, 1-DCE) and 1, 1, 1-trichloroethane (1, 1, 1-TCA). The NJDEP Groundwater Quality Criteria for 1, 1-DCE (2.0 ppb) and 1, 1, 1-TCA (30 ppb) have not changed since the date of the NFA approval. A Classification Exemption Area was approved for site groundwater in the NJDEP's 9/12/96 letter. In accordance with N.J.A.C. 7:26E, 3.2(a)5i(3), the site groundwater was remediated to an approved site specific standard, and all of the factors and assumptions which were the basis for deriving the site specific remediation standard remain valid for the site.

10

#### Historical Data on environmental quality at the Industrial Establishment

- A. Have any previous sampling results documenting environmental quality of the Industrial Establishment not received a no further action approval from the Department or been denied approval by the Department? (N.J.A.C. 7:26E-3.1(c)1.viii)

     Yes (see below)

    X     No (Go to 11)

- 11 List all federal, state and local environmental permits at this facility, including permits for all previous and current owners or operators, applied for, received, or both (Attach additional sheets if necessary).

Check here if no permits are involved \_\_\_\_\_

A. New Jersey Air Pollution Control  
(see Appendix K for copies)

Permit Number	Expiration Date	Type of Permitted Unit
01-97-4180	1/8/03	Construct, install, alter, operate Stack # York-01
01-97-4181	1/8/03	Construct, install, alter, operate Stack # Fulton-01
01-97-4182	1/8/03	Construct, install, alter, operate Stack # PK-01
01-97-4183	1/8/03	Construct, install, alter, operate Stack # PK -02
01-97-4184	1/8/03	Construct, install, alter, operate Stack # PK -03
01-97-4185	1/8/03	Construct, install, alter, operate Stack # PK -04

B. Underground Storage Tank Registration Number N/A

Size of Tank (Gallons)	Tank Contents
none	---

C. New Jersey Pollutant Discharge Elimination System (NJPDES) Permit  
(see Appendix K for a copy)

Permit Number	Discharge Type	Discharge Location Keyed to Site map	Expiration Date
NJ0131776	Stormwater to Surface Water	Not indicated on permit but believed to be Randolph Creek located several hundred yards north of the facility	1/31/02

D. Resource Conservation and Recovery Act (RCRA) permit # N/A

E. EPA Identification Number NJDO44655140 for 25 Schoolhouse Road  
(19 Schoolhouse Road has no EPA ID number)



F. In accordance with N.J.A.C. 7:26E-3.1(c) xii, list all other federal, state, local government environmental permits for all previous and current owners or operators applied for and/or received for the site including :

- (1) Name and address of the permitting agency
- (2) The reason for the permit
- (3) The permit identification number
- (4) The application date
- (5) The date of approval, denial or status of the application
- (6) The name and current address of the permittees
- (7) The reason for the denial, revocation or suspension if applicable
- (8) The permit expiration date

There are no other permits for either 19 or 25 Schoolhouse Road.

12. In accordance with N.J.A.C. 7:26E-3.1(c)xiii, provide a summary of enforcement actions (including but not limited to, Notice of Violations, Court Orders, official notices or directives) for violations of environmental laws or regulations (attach additional sheets if necessary):

#### Enforcement Actions

A. Check here if no enforcement actions are involved:  X  (Go to 13 otherwise complete 12B)

B. (1) Name and address of agency that initiated the enforcement action:

(2) Date of the enforcement action:

(3) Section of statute, rule or permit allegedly violated:

(4) Type of enforcement:

(5) Description of the violation:

(6) How was the violation resolved?

13. In accordance with N.J.A.C. 7:26E-3.1(c) xiv, please provide a narrative description of all areas where non-indigenous fill materials were used to replace soil or raise the topographic elevation of the site, including the dates of emplacement.

None known.

14. A. In accordance with N.J.A.C. 7:26E-3.2(a) 3.i, submit a scaled site plan, detailing the subject lot and block, property and or leasehold boundaries, location of current and former buildings, fill areas, paved and unpaved areas, vegetated areas, and all areas of concern identified above and all active or inactive wells.

See Appendix A for Site Plan for both 19 and 25 Schoolhouse Road. The leasehold boundary for 19 Schoolhouse Road is depicted in the Evacuation Plan, also found in Appendix A.

- B. Scaled historical site maps and facility as built drawings (if available).

No historic site maps or as-built drawings were readily available for either site.

(Note: the availability of historic drawings and as-builts was limited because of relatively short occupancy tenure of Lucent and short ownership tenure of property owner at both locations.)

- C. A copy of the United States Geologic Survey (USGS) 7.5 minute topographical quadrangle that includes the site and an area of at least one mile radius around the site. The facility location shall be clearly noted. If a portion of the USGS quadrangle is used, the scale, north arrow, contour interval, longitude and latitude with the name and date of the USGS quadrangle shall be noted on the map.

See Appendix A for topographic map depicting these two adjoining sites.

15. In accordance with N.J.A.C. 7:26E-3.2, please provide the date that the site visit was completed to verify the findings of the preliminary assessment:

August 10, 2001

16. List any other information you are submitting or which has been formerly requested by the Department:

Description	Appendix #
None	---

**CERTIFICATION:**

The following certification shall be signed by the highest-ranking individual at the site with overall responsibility for that site or activity. Where there is no individual at the site with overall responsibility for that site or activity, this certification shall be signed by the individual having responsibility for the overall operation of the site or activity.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information, and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Typed/Printed Name Stanley C Wisniewski II Title Dir Bus & Mfg Ops

Signature [Signature] Date 2/11/02

Sworn to and Subscribed Before Me on this Feb. 11, 2002

Date of Feb. 11 2002

[Signature]  
Notary

**PATRICIA L WOLFE**  
**NOTARY PUBLIC OF NEW JERSEY**  
Commission Expires 1/18/2006

ATTACHMENT E

CN 028  
Trenton, N.J. 08625-0028

Let's protect our earth



(609)633-7141

**State of New Jersey**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**DIVISION OF HAZARDOUS WASTE MANAGEMENT**

Michela M. Putnam  
Deputy Director  
Hazardous Waste Operations

John J. Trela, Ph.D., Director

Lance R. Miller  
Deputy Director  
Responsible Party Remedial Action

**MAR 27 1989**

Joseph M. Galley  
Enviro-Science, Inc.  
111 Howard Blvd., Suite 108  
Mt. Arlington, N.J. 08756

Dear Mr. Galley:

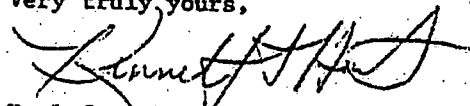
RE: Industrial Establishment: Microwave Semiconductor Corporation  
Location: 100 School House Rd., Franklin Twp., Somerset County  
Block: 514, 517 Lot: 20.01  
ECRA Case #88B51  
Transaction: Sale of Business and Sale of Property  
Negative Declaration: By Owner Dated: March 14, 1989  
By Operator Dated: March 14, 1989

Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (DEP) by the Environmental Cleanup Responsibility Act (ECRA, N.J.S.A. 13:1K-6 et seq.) and duly delegated to the Assistant Director of the Industrial Site Evaluation Element pursuant to N.J.S.A. 13:1B-4, the referenced Negative Declaration is hereby approved. This approval is based upon information provided in your Initial Notice as well as DEP investigation of the site.

Since the current operation will be continued at this location after completion of the transaction, it is recognized that limited quantities of hazardous substances associated with the on-going activities will remain on the property. These materials—as specified in your Initial Notice, considered complete by this office on 1/10/89—are being handled in accordance with appropriate DEP regulations and are acceptable under the provisions of ECRA.

This approval shall be limited to the above referenced transaction only and shall not restrict or prohibit the DEP or any other agency from taking regulatory action under any other statute, rule or regulation.

Very truly yours,

  
Karl J. Delaney, Assistant Director  
Industrial Site Evaluation Element

CJH/nb

New Jersey is an Equal Opportunity Employer  
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**ATTACHMENT F**

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF PUBLICLY FUNDED SITE REMEDIATION  
BUREAU OF GROUND WATER POLLUTION ABATEMENT

MEMORANDUM

JUN 21 1995

TO: Mark Souders, Case Manager  
BEECRA

THROUGH: Robert Lux, Supervising Geologist  
Bureau of Ground Water Pollution Abatement

FROM: Renee Bancroft, Geologist  
Bureau of Ground Water Pollution Abatement

SUBJECT: Microwave Semiconductor  
Franklin Twp., Somerset County  
ISRA #89560  
Referral Type:RAR Referral Date:6/2/95  
Document date: April 19, 1995  
Job #:T080E00/V96B

DATE:

As requested, I have reviewed the Quarterly GW monitoring results for March 1995. Following this sampling event the Mann-Whitney U Test was applied to 1,1 DCE and 1,1,1 TCA in MW-2, 2A (deep well) and 4.

Although not concluded with 90% confidence by the statistical analysis the concentrations in MW-2 represent a decreasing trend. The decreasing trend in MW-2A has been confirmed with 90% confidence, indicating that the contaminants in MW-2 are not migrating vertically.

The 3/95 results are as follows:

(ppb)	MW-2	MW-2A	MW-4	GWQC
methylene chloride	<2.2	4.3	1.3	2
1,1 DCE	75	7.4	5.8	2
1,1,1 TCA	160	16	10	30
1,1 DCA	16	0.6	<0.59	70

Proposal: Microwave Semiconductor (MS) proposes to terminate monitoring in MW-2A, but continue monitoring MW-2 and 4. Following each quarter the Mann-Whitney U Test will be applied to the data to determine the need to continue monitoring at these locations.

RECOMMENDATIONS: MS is not required to continue sampling at MW-2A; although MS shall be aware that CEA is necessary for this site based on the most recent GW data. A CEA proposal will be required when MS wishes to close the case if the contaminants are still in excess of the GWQS's.

When MS determines that no further GW action should be required at their site they shall, at a minimum, submit a written and mapped description of the area in which constituent standards are not or will not be met; an identification of the contaminants for which the CEA has been established; and an estimate of the longevity of the CEA. For sites with off-site impacts in GW use areas, delineation of the known and expected migration path of the contaminant plume is required. The CEA "boundaries" should also be defined by an identification of the affected formation(s).

**\*\*NOTE TO CASE MANAGER:** Please provide a copy of the Final Guidance on Designation of CEA to the RP.

If you have any questions please call 2-8427.

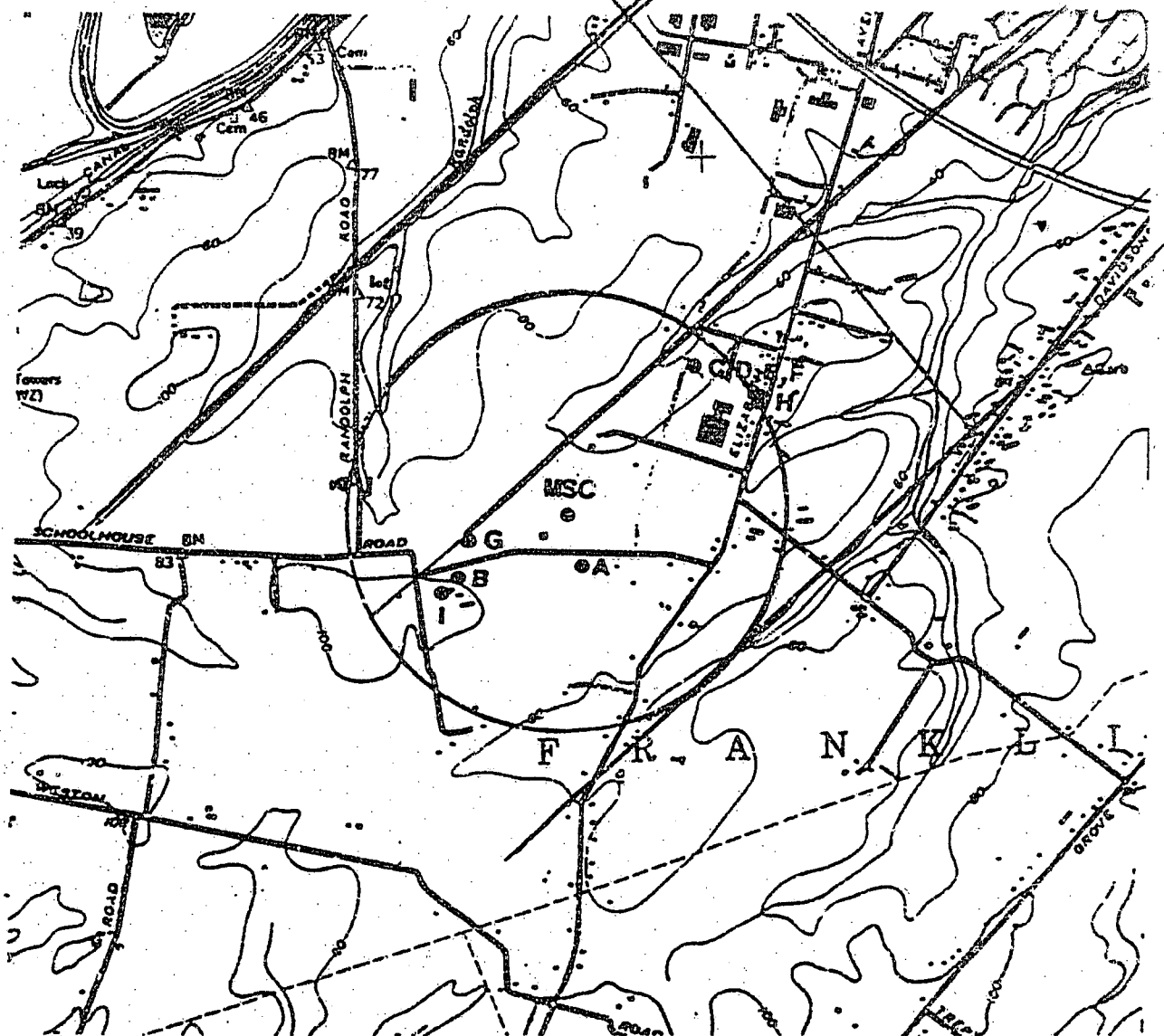
c: File (KF)



USGS 7.5' Series Map

Groundwater Flow  
Direction as Evidenced  
by the Valley Trends

BOUND BROOK QUADRANGLE



Scale: 1" = 2000'

Well Locations Within One Half Mile Radius

Microwave Semiconductor Corp.  
Somerset, New Jersey

Figure 3-3

Date: November 6, 1990

LAN Job #23177.1

LAN ASSOCIATES

engineering • planning • architecture  
802 GOFFLE ROAD, HAWTHORNE, N.J. 07306  
201-423-0350

ATTACHMENT G



DONALD T. DiFRANCESCO  
Acting Governor

State of New Jersey  
Department of Environmental Protection

Robert C. Shinn, Jr.  
Commissioner

IN THE MATTER OF  
THE FRANKLIN TOWNSHIP SITES  
LUCENT TECHNOLOGIES  
AND TRIPLE NET INVESTMENTS V LP  
AND PROVIDENT SOMERET PARTNER LLC

REMEDIATION  
AGREEMENT

ISRA Case # 's E200103<sup>9</sup> and E20010310

This Remediation Agreement is issued and entered into pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection, (hereinafter the "NJDEP") by N.J.S.A. 13:1D-1 et. seq., and the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et. seq., and duly delegated to the Assistant Director within the Division of Responsible Party Site Remediation pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1A. The first property that is the subject of this Remediation Agreement is operated by Lucent Technologies-Specialty Fiber, and owned by Provident Somerset Partner LLC. It is located at 19 Schoolhouse Road and is designated as Block 517.05, Lot 35.08 on the tax maps of the Franklin Township, Middlesex County, New Jersey (hereinafter the "19 Schoolhouse Road industrial establishment"). The Standard Industrial Classification ("SIC") number which best describe the operations at the 19 Schoolhouse Road industrial establishment is 3229.

1B. The second property that is the subject of this Remediation Agreement is operated by Lucent Technologies-Specialty Fiber, and owned by Triple Net Investments V LP. It is located at 25 Schoolhouse Road and is designated as Block 517.02, Lot 20.01 on the tax maps of the Franklin Township, Middlesex County, New Jersey (hereinafter the "25 Schoolhouse Road industrial establishment"). The Standard Industrial Classification ("SIC") number which best describe the operations at the 25 Schoolhouse Road industrial establishment is 3229.

2. On September 13, 2001, Lucent Technologies Inc. submitted to NJDEP an application for a Remediation Agreement pursuant to N.J.A.C. 7:26B-4.1. This Remediation Agreement application is incorporated herein by reference and includes the following information:

**A. Transaction**

**Seller:** Lucent Technologies Inc., a Delaware corporation

**Buyer:** OFS Lycom Inc., a Delaware corporation

**Description:** Lucent Technologies Inc. has proposed to sell its Optical Fiber Business to OFS Lycom Inc. OFS Lycom Inc. will continue operations at 19 Schoolhouse Road and 25 Schoolhouse Road industrial establishments.

**B.** Person(s) executing this Remediation Agreement and responsible for conducting the remediation of the 19 Schoolhouse and 25 Schoolhouse industrial establishments (hereinafter collective referred to as Franklin Township industrial establishments)

**Lead Responsible Person:**

**Name:** Lucent Technologies Inc.  
**Business:** A Delaware Corporation  
**Address:** 475 South Street  
Morristown, NJ 07962-1976  
**Telephone No.** (973) 606-4001

3. NJDEP and Lucent Technologies Inc. expressly agree that the terms and conditions of this Remediation Agreement shall apply to the industrial establishment listed in Paragraph 1 above. Furthermore, NJDEP and the Lucent Technologies Inc. agree to administer and complete all applicable ISRA program requirements, including the remediation funding source requirements and any other remedial measures undertaken pursuant to this Remediation Agreement and ISRA, for the industrial establishment.

4. The transaction described in Paragraph 2.A above is the transfer of ownership or operations of an industrial establishment as defined by ISRA. NJDEP and Lucent Technologies Inc. expressly agree that the transaction described in Paragraph 2.A above is subject to ISRA. Lucent Technologies Inc. has requested that NJDEP prepare a Remediation Agreement which, when effective, will allow the transaction described in Paragraph 2.A above to be consummated prior to the completion of all administrative and remediation requirements pursuant to ISRA.

5. By entering into this Remediation Agreement, Lucent Technologies Inc. neither admits to any fact, fault or liability under any statute or regulation concerning the condition of the Site nor waives any rights or defenses with regard to the site except as specifically provided in this Remediation Agreement.

## AGREEMENT

### I. Remediation

1. Lucent Technologies Inc. agrees to remediate the Franklin Township industrial establishments and to submit the following documents as established below:

A. Within one hundred and eighty (180) calendar days after the NJDEP's receipt of the General Information Notice (GIN) or such additional time as authorized by NJDEP, Lucent Technologies Inc. shall submit a preliminary assessment report, site investigation report, and remedial investigation workplan, as applicable, prepared in accordance with N.J.A.C. 7:26E or Lucent Technologies Inc. shall submit a Negative Declaration for the Franklin Township industrial establishments.

B. Within three hundred (300) calendar days after the NJDEP's receipt of the General Information Notice (GIN) or within one hundred twenty (120) calendar days from receipt of NJDEP's written approval of the Remedial Investigation Workplan or longer as authorized by NJDEP, Lucent Technologies Inc. shall submit a Remedial Investigation Report in accordance with N.J.A.C. 7:26E or Lucent Technologies Inc. shall submit a Negative Declaration for the Franklin Township industrial establishments.

C. Within four hundred and twenty (420) calendar days after the NJDEP's receipt of the General Information Notice (GIN) or within one hundred and twenty (120) calendar days from receipt of NJDEP's written approval of the Remedial Investigation Report or longer as authorized by NJDEP, Lucent Technologies Inc. shall submit a Remedial Action Workplan as applicable, prepared in accordance with N.J.A.C. 7:26E or Lucent Technologies Inc. shall submit a negative declaration for the Franklin Township industrial establishments.

D. The NJDEP will review all documents in accordance with N.J.A.C. 7:26B and N.J.A.C. 7:26E.

2. If NJDEP determines any submittal made under this section is inadequate or incomplete, the NJDEP shall provide Lucent Technologies Inc. with written notification of each deficiency, and Lucent Technologies Inc. shall revise and resubmit the required information within thirty (30) calendar days, or longer as authorized by NJDEP, from receipt of such notification.

3. If the NJDEP determines that no further action is required at the Franklin Township industrial establishments, Lucent Technologies Inc. shall submit a negative declaration, in accordance with N.J.A.C. 7:26B-6.6, within thirty (30) calendar days or longer as authorized by NJDEP from receipt of the NJDEP's request for the submission of the negative declaration.

4. Nothing in this Remediation Agreement shall be construed to limit, restrict or prohibit any person(s) responsible for conducting the remediation of the Franklin Township industrial

establishments from implementing any applicable ISRA compliance options in accordance with N.J.A.C. 7:26B-5 to satisfy the requirements of ISRA.

5. If at any time that this Remediation Agreement is in effect the NJDEP determines that the requirements of N.J.A.C. 7:26E are not being achieved or that additional remediation is required to protect the public health and safety or the environment, Lucent Technologies Inc. shall conduct such additional remediation as the NJDEP directs.

6. The NJDEP will consider a request for an extension of time to perform any requirement under this Remediation Agreement, provided that any extension request is submitted to the NJDEP fourteen (14) calendar days prior to any applicable deadline to which the extension request refers.

## II. Remediation Funding Source

7. Lucent Technologies Inc. shall establish and maintain a remediation funding source in a form pursuant to N.J.A.C. 7:26C-7 in the amount of \$100,000.00 for each of the Franklin Township industrial establishments. If Lucent Technologies Inc. chooses and the Department approves in writing an innovative remedial action technology, unrestricted use or limited restricted use remedial action for all or part of the remedial action. Lucent Technologies Inc. is not required to maintain a remediation funding source for the cost of implementing the innovative remedial action technology, unrestricted use or limited restricted use remedial action.

8. Upon submission of the remediation funding source and annually thereafter, Lucent Technologies Inc. shall submit a remediation funding source surcharge payment in an amount equal to one percent of the required amount of the remediation funding source. Lucent Technologies Inc. shall submit to the NJDEP a cashier's or certified check payable to the "New Jersey Economic Development Authority" for the full amount of the remediation funding source surcharge. No surcharge is due on the amount of the remediation funding source established as self-guarantee or the amount of the remediation funding source that is established by financial assistance or a grant from the Hazardous Discharge Site Remediation Fund.

9. Whenever the remediation cost increases, Lucent Technologies Inc. shall cause the amount of the remediation funding source to be increased to an amount at least equal to the new estimate within thirty (30) calendar days.

10. Whenever the remediation cost decreases, Lucent Technologies Inc. may file a written request to NJDEP to decrease the amount in the remediation funding source. If NJDEP approves, Lucent Technologies Inc. may decrease the remediation funding source upon receipt of NJDEP's written approval to the person who established the remediation funding source and to the person or institution providing the remediation funding source.

11. NJDEP shall return the remediation funding source established upon Lucent Technologies Inc. submission of a substitute remediation funding source or upon NJDEP's issuance of a no further action letter for the Franklin Township industrial establishments.

12. In the event that NJDEP determines that Lucent Technologies Inc. has failed to perform any of its obligations under this Remediation Agreement or ISRA, NJDEP shall notify the Lucent Technologies Inc. in writing of the obligation(s) with which it has not complied and Lucent Technologies Inc. shall revise and resubmit the required information within a reasonable period of time not to exceed thirty (30) calendar days or longer as authorized by NJDEP from receipt of such notification. If Lucent Technologies Inc. fails to revise and resubmit the required information within the schedule established above, NJDEP may perform the remediation in place of Lucent Technologies Inc. making disbursements from the remediation funding source and may pursue any additional rights and remedies in accordance with N.J.S.A. 58:10B-3(g). Nothing in this paragraph shall prevent NJDEP from seeking civil or civil administrative penalties, costs and damages or any other legal or equitable relief against Lucent Technologies Inc.

### III. Project Coordination

13. Within seven (7) calendar days after the effective date of this Remediation Agreement, Lucent Technologies Inc. shall submit to the NJDEP the name, title, address and telephone number of the individual who shall be Lucent Technologies Inc.'s technical contact for the NJDEP for all matters concerning this Remediation Agreement and Lucent Technologies Inc. shall designate an agent for the purpose of service for all matters concerning this Remediation Agreement and shall provide the NJDEP with the agent's name and address.

14. Unless otherwise directed by NJDEP, any submission to be made to NJDEP in accordance with this Remediation Agreement and ISRA shall be directed to:

Wayne C. Howitz, Assistant Director  
Industrial Site Evaluation Element  
Division of Responsible Party Site Remediation  
401 East State Street  
P.O. Box 432  
Trenton, NJ 08625-0028

### IV. Oversight Cost Reimbursement

15. All submissions required pursuant to this Remediation Agreement shall be accompanied by all appropriate fees pursuant to N.J.A.C. 7:26B-8.

16. Within thirty (30) calendar days after receipt from the NJDEP of a written summary, conforming to N.J.A.C. 7:26B-8.2, of the NJDEP's oversight costs, including all accrued interest incurred pursuant to the paragraph below, determined pursuant to N.J.A.C. 7:26B-8, Lucent Technologies Inc. shall submit to the NJDEP a cashier's or certified check payable to the "Treasurer, State of New Jersey" and submitted with DEP Form 062A in accordance with N.J.A.C. 7:26B-8.4, for the full amount of the NJDEP's oversight costs. Nothing contained in the paragraph shall be construed to limit or restrict any person's ability to contest any oversight

costs calculated pursuant to N.J.A.C. 7:26B-8.2(d) in accordance with the oversight cost review procedures at N.J.A.C. 7:26B-8.3.

17. Interest shall accrue on the unpaid balance of oversight costs, beginning at the end of the thirty (30) calendar day period established in the preceding paragraph, at the rate established by Rule 4:42 of the current edition of the Rules Governing the Courts of the State of New Jersey.

V. Force Majeure

18. If any event specified in the following paragraph occurs which Lucent Technologies Inc. believes or should believe will or may cause delay in the compliance or cause non-compliance with any provision of this Remediation Agreement, Lucent Technologies Inc. shall notify the NJDEP in writing within seven (7) calendar days of the start of delay or knowledge of the anticipated delay, as appropriate, referencing this paragraph and describing the anticipated length of the delay, the precise cause or causes of the delay, any measures taken or to be taken to minimize the delay, and the time required to take any such measures to minimize the delay. Lucent Technologies Inc. shall take all necessary action to prevent or minimize any such delay.

19. The NJDEP will extend in writing the time for compliance for a period no longer than the delay resulting from such circumstances as determined by the NJDEP only if:

(a) Lucent Technologies Inc. has complied with the notice requirements of the preceding paragraph;

(b) Any delay or anticipated delay has been or will be caused by fire, flood, riot, strike or other circumstances beyond the control of Lucent Technologies Inc.; and

(c) Lucent Technologies Inc. has taken all necessary action to prevent or minimize any such delay.

20. The burden of proving that any delay is caused by circumstances beyond the control of Lucent Technologies Inc. and the length of any such delay attributable to those circumstances shall rest with Lucent Technologies Inc..

21. "Force Majeure" shall not include the following:

(a) Delay in an interim requirement with respect to the attainment of subsequent requirements;

(b) Increases in the cost or expenses incurred by Lucent Technologies Inc. in fulfilling the requirements of this Remediation Agreement;

(c) Contractor's breach, unless Lucent Technologies Inc. demonstrates that such breach falls within paragraph 19 above; and



(d) Failure to obtain access required to implement this Remediation Agreement, unless denied by a court of competent jurisdiction.

#### VI. Reservation of Rights

22. By entering into this Remediation Agreement, the NJDEP does not waive its right to seek, assess or collect civil or civil administrative penalties or any other legal or equitable relief against Lucent Technologies Inc. for past, present and future violations by Lucent Technologies Inc. of any New Jersey environmental statutes or regulations.

23. The NJDEP reserves the right to require Lucent Technologies Inc. to take or arrange for the taking of any and all additional measures if the NJDEP determines that such actions are necessary to protect human health or the environment.

24. Lucent Technologies Inc. admits that it has agreed to comply with the terms of this Remediation Agreement. Neither the entry into this Remediation Agreement nor the conduct of Lucent Technologies Inc. hereunder, shall be construed as any admission of fact, fault or liability by the Lucent Technologies Inc. under any applicable laws or regulations.

25. Except as otherwise set forth herein, by the execution of this Remediation Agreement, the NJDEP does not release any person, including without limitation, Triple Net Investments V LP, C-ROC LLC or Provident Somerset Partner LLC, from any liabilities or obligations such person may have pursuant to ISRA and the ISRA regulations, or any other applicable authority, nor does the NJDEP waive any of its rights or remedies pursuant thereto.

#### VII. General Provisions

26. No modification or waiver of this Remediation Agreement shall be valid except by written amendment to this Remediation Agreement duly executed by Lucent Technologies Inc. and the NJDEP. Any amendment to this Remediation Agreement shall be executed by the NJDEP and Lucent Technologies Inc.. The NJDEP reserves the right to require the resolution of any outstanding violations ISRA or this Remediation Agreement prior to executing any such amendment.

27. This Remediation Agreement shall be binding, jointly and severally, on each signatory, its successors, assignees and any trustee in bankruptcy or receiver appointed pursuant to a proceeding in law or equity. No change in the ownership or corporate status of any signatory or of the industrial establishment or site shall alter signatory's responsibilities under this Remediation Agreement.

28. Lucent Technologies Inc. agrees not to contest the authority or jurisdiction of the NJDEP to issue this Remediation Agreement; Lucent Technologies Inc. further agrees not to contest the terms or conditions of this Remediation Agreement except as to interpretation or application of

such specific terms and conditions that are being enforced in any action brought by the NJDEP to enforce the provisions of this Remediation Agreement.

29. Lucent Technologies Inc. shall provide to the NJDEP written notice of the dissolution of its corporate or partnership identity, the liquidation of the majority of its assets or the closure, termination or transfer of operations at least five (5) calendar days prior to such action. Lucent Technologies Inc. shall also provide written notice to the NJDEP of a filing of a petition for bankruptcy no later than five business days after such filing. These requirements shall be in addition to any other statutory requirements arising from the dissolution of corporate or partnership identity, the liquidation of the majority of assets, or the closure, termination or transfer of operations.

30. For persons executing this Remediation Agreement on behalf of a corporate entity, Lucent Technologies Inc. shall submit to the NJDEP, along with the executed original Remediation Agreement, documentary evidence in the form of a corporate resolution, that the signatory has the authority to bind Lucent Technologies Inc. to the terms of this Remediation Agreement.

31. Lucent Technologies Inc. expressly agrees that in the event that Lucent Technologies Inc. fails or refuses to perform any obligation(s) under this Remediation Agreement as determined by the NJDEP, the NJDEP shall have the right to exercise any option or combination of options available to the NJDEP under this Remediation Agreement, or any other statute.

32. Except as otherwise provided, the requirements of this Remediation Agreement shall be deemed satisfied upon the receipt by Lucent Technologies Inc. of written notice from the NJDEP that Lucent Technologies Inc. has demonstrated, to the satisfaction of the NJDEP, that Lucent Technologies Inc. has completed the substantive and financial obligations imposed by this Remediation Agreement. Such written notice shall not relieve Lucent Technologies Inc. from the obligation to conduct future investigation or remediation activities pursuant to federal, State or local laws for matters not addressed by this Remediation Agreement.

33. Compliance with the terms of this Remediation Agreement shall not excuse any Person(s) from obtaining and complying with any applicable federal, state or local permits, statutes, regulations and/or orders while carrying out the obligations imposed by ISRA through this Remediation Agreement. The execution of this Remediation Agreement shall not excuse any Person(s) from compliance with all other applicable environmental permits, statutes, regulations and/or orders and shall not preclude NJDEP from requiring that the Person(s) obtain and comply with any permits, and/or orders issued by NJDEP under the authority of the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Spill Compensation and Control Act N.J.S.A. 58:10-23.11 et seq., for the matters covered herein. The terms and conditions of any such permit shall not be preempted by the terms and conditions of this Remediation Agreement if the terms and conditions of any such permit are more stringent than the terms and conditions of this Remediation Agreement. Should any of the measures to be taken by the Person(s) during the remediation of any ground water and surface water pollution result in a new or modified discharge as defined in the New Jersey Pollutant

34. This Remediation Agreement shall be effective upon the execution of this Remediation Agreement by the NJDEP and Lucent Technologies Inc. Lucent Technologies Inc. may consummate the transaction described at Paragraph 2.A above, upon the execution of this Remediation Agreement. Lucent Technologies Inc. shall return a fully executed Remediation Agreement to the NJDEP together with the signature authorization required above within five business days from the effective date.

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Date: 9/24/01

By: Ronald T. Corcory  
Ronald T. Corcory, Assistant Director  
Responsible Party Cleanup Element

**LUCENT TECHNOLOGIES INC.**

Date: 10/03/2001

By: Richard H. Bennett  
of \_\_\_\_\_

Richard H. Bennett  
Print Full Name Signed Above

Environ. Health & Safety Vice President  
Title

**ATTACHMENT H**

Let's protect our earth



**State of New Jersey**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**DIVISION OF HAZARDOUS WASTE MANAGEMENT**

CN 028  
Trenton, N.J. 08625-0028  
(609) 633-7141  
Fax # (609) 633-1454

William G. Smith  
Enviro-Sci Corporation  
250 Danell Road  
Radnor, PA 19087-4612

MAR 20 1991

Dear Mr. Smith:

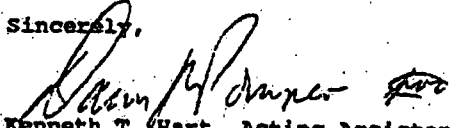
RE: Industrial Establishment: SGS-Thomson Microelectronics, Inc.  
Location: 100 Schoolhouse Road, Franklin Twp., Somerset County  
Block: 514 Lot: 20.01  
ECRA Case # 90617  
Transaction: Cessation of Operations  
Negative Declaration: By Operator Dated: February 6, 1991

Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (DEP) by the Environmental Cleanup Responsibility Act (ECRA, N.J.S.A. 13:1K-6 et seq.) and duly designated to the Assistant Director of the Industrial Site Evaluation Element pursuant to N.J.S.A. 13:1B-4, the referenced Negative Declaration is hereby approved. This approval is based upon information provided in your Initial Notice as well as DEP investigation of the site.

It is recognized that limited quantities of hazardous substances associated with the emergency generator (1-1,000 gallon diesel fuel oil underground storage tank) for this facility will remain on the property. This material as specified in your Initial Notice considered complete by this office on August 24, 1990 is acceptable under the provisions of ECRA.

This approval shall be limited to the above referenced transaction only and shall not restrict or prohibit the DEP or any other agency from taking regulatory action under any other statute, rule or regulation. By issuing this Negative Declaration, NJDEP continues to reserve all rights to pursue any penalties allowable under the law for violations of the ECRA statute or regulations associated with this transaction.

Sincerely,

  
Kenneth T. Hart, Acting Assistant Director  
Industrial Site Evaluation Element

New Jersey is an Equal Opportunity Employer  
Recycled Paper



P289

**ATTACHMENT I**



State of New Jersey  
Department of Environmental Protection and Energy  
Division of Responsible Party Site Remediation  
CN 028  
Trenton, NJ 08625-0028

Scott A. Welner  
Commissioner

Karl J. Delaney  
Director

APR 06 1993

William Smith  
Enviro-Sci Corporation  
250 Danell Road  
Radnor, PA 19087-4612

RE: Industrial Establishment: SGS-Thomson Microelectronics, Inc.  
Location: 25 School House Road, Franklin Twp., Somerset County  
Block: 517 Lot: 20.01  
ECRA Case # 91759  
Transaction: Sale of Business  
Negative Declaration by operator dated March 19, 1993

Dear Mr. Smith:

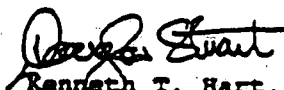
Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection and Energy (NJDEPE) by the Environmental Cleanup Responsibility Act (ECRA), (N.J.S.A. 13:1K-6 et seq.) and duly delegated to the Assistant Director of the Industrial Site Evaluation Element pursuant to N.J.S.A. 13:1B-4, the referenced Negative Declaration is hereby approved. This approval is based upon information provided in your Initial Notice as well as NJDEPE investigation of the site.

Please be advised that this Negative Declaration approval is for the operations of SGS-Thomson Microelectronics, Inc. starting from October 10, 1989. This Negative Declaration approval does not apply to prior operations and areas of environmental concern which are being addressed in a Cleanup Plan approval for Microwave Semiconductor Corporation under ECRA Case # 89560. Please be advised that access to the above premises will be required for the completion of the referenced Cleanup Plan.

Since the current operation will be continued at this location after completion of the transaction, limited quantities of hazardous substances associated with the on-going activities will remain on the property. These materials, as specified in your Initial Notice, considered complete by this office on March 9, 1992 are being handled in accordance with appropriate NJDEPE regulations and are acceptable under the provisions of ECRA.

This approval shall be limited to the above referenced transaction only and shall not restrict or prohibit the NJDEPE or any other agency from taking regulatory action under any other statute, rule or regulation. By issuing this Negative Declaration, NJDEPE continues to reserve all rights to pursue any penalties allowable under the law for violations of the ECRA statute or regulations associated with this transaction.

Sincerely,



Kenneth T. Hart, Assistant Director  
Industrial Site Evaluation Element

c: Joseph Carlano, Franklin Twp Health Department  
Archie Max Malone, SGS-Thomson Microelectronics, Inc.  
Daniel Kurtzman, Goldberg, Millenky & Kurtzman  
Tod Road, Gilberg & Kurent  
Tina Layre, BAC



ATTACHMENT I



State of New Jersey  
Department of Environmental Protection and Energy  
Division of Responsible Party Site Remediation  
CN 028  
Trenton, NJ 08625-0028

Jeanne M. Fox  
Acting Commissioner

Karl J. Delaney  
Director

JAN 14 1994

WILLIAM G SMITH  
ENVIROSCI CORPORATION  
250 DANELL ROAD RADNOR PA 19087

RE: Industrial Establishment: SGS THOMSON MICROELECTRONICS INC  
Location: 25 SCHOOLHOUSE ROAD, FRANKLIN TWP, SOMERSET COUNTY  
Block: 517 Lot: 20.01  
ISRA Case # 93445  
Transaction: CESSATION of OPERATIONS  
Negative Declaration Affidavit by operator dated 01/04/94

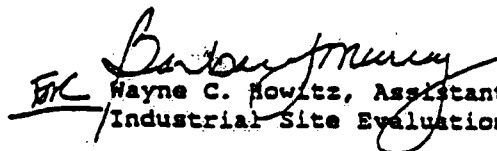
Dear Mr. Smith:

Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection and Energy (NJDEPE) by the Industrial Site Recovery Act, (ISRA) formerly known as the Environmental Cleanup Responsibility Act (ECRA), (N.J.S.A. 13:1K-6 et seq.) and duly delegated to the Assistant Director of the Industrial Site Evaluation Element pursuant to N.J.S.A. 13:1B-4, the referenced Negative Declaration Affidavit is hereby approved. This approval is based upon information provided in your Initial Notice.

Please be advised that this No Further Action approval is for the operations of SGS THOMSON MICROELECTRONICS INC starting from 10/10/89. This No Further Action approval does not apply to prior operations and areas of environmental concern which are being addressed in a Cleanup Plan approval for MICROWAVE SEMICONDUCTOR CORP under ISRA Case #89560. Please be advised that access to the above premises will be required for the completion of the referenced Cleanup Plan.

This approval shall be limited to the above referenced transaction only and shall not restrict or prohibit the NJDEPE or any other agency from taking regulatory action under any other statute, rule or regulation. By issuing this No Further Action letter, NJDEPE continues to reserve all rights to pursue any penalties allowable under the law for violations of the ISRA statute or ECRA regulations associated with this transaction.

Sincerely,

  
Wayne C. Nowitz, Assistant Director  
Industrial Site Evaluation Element

c: Mark Souders, BEECRA  
Health Officer

J.

ATTACHMENT K



**State of New Jersey**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE  
Governor

LISA P. JACKSON  
Commissioner

IN THE MATTER OF:  
THE FRANKLIN TOWNSHIP SITE  
CARDINAL HEALTH 406, LLC,  
SUN TRUST BANKS, INC. AND  
CARDINAL HEALTH, INC.

: REMEDIATION  
: AGREEMENT

ISRA Case # E20070038  
PI # 014287

This Remediation Agreement is issued and entered into pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection, (hereinafter the "Department" or "DEP") by N.J.S.A. 13:1D-1 et seq., the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et seq., and the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq., and duly delegated to the Assistant Director for the Oversight Resources Allocation Element within the Division of Remediation Support pursuant to N.J.S.A. 13:1B-4.

**FINDINGS**

1. The property that is the subject of this Remediation Agreement is located at 14 Schoolhouse Road, and designated as Block 514, Lot 20.04 on the tax maps of Franklin Township, Somerset County, New Jersey (hereinafter "Property"), and includes all other areas to which any hazardous substance discharged on the Property has migrated (collectively, "the Site" or "Franklin Township Site"). The Property is owned by Sun Trust Bank, Inc. and operated by Cardinal Health 406, LLC.

2. On April 3, 2007, Cardinal Health, Inc. submitted to the Department an application for a Remediation Agreement pursuant to N.J.A.C. 7:26B-4.1. This Remediation Agreement application is incorporated herein by reference and includes the following information:

A. Transaction

Seller: Cardinal Health 406, LLC

Buyer: Cardinal Health 409, Inc.

K

Description: Cardinal Health 406, LLC, a subsidiary of Cardinal Health, Inc., has reached an agreement to sell its PTS business assets to Phoenix Charter LLC who will be assigning its rights under the asset purchase agreement to a subsidiary, PTS Acquisitions Corp, which in turn is merging into Cardinal Health 409, Inc. Thus, upon completion of the transaction, Cardinal Health 409, Inc. will continue the operations, and Sun Trust Banks, Inc. will continue to own the Property.

B. Person(s) executing this Remediation Agreement and responsible for conducting the remediation of the Site (hereinafter referred to as "Person(s)").

Name: Cardinal Health, Inc.

Business Association: Corporation of Ohio

Address: 7000 Cardinal Place  
Dublin, Ohio 43017

Telephone No.: (614) 757-7604

3. The Department and Cardinal Health, Inc. expressly agree that the terms and conditions of this Remediation Agreement shall apply to the Site listed in paragraph 1 above. Furthermore, the Department and Cardinal Health, Inc. agree to administer and complete all applicable ISRA program requirements, including the remediation funding source requirements and any other remedial measures undertaken pursuant to this Remediation Agreement and ISRA, for the Site.

4. The transaction described in paragraph 2.A above is the transfer of ownership or operations of an industrial establishment as defined by ISRA. The Department and Cardinal Health, Inc. expressly agree that the transaction described in paragraph 2.A above is subject to ISRA. Cardinal Health, Inc. has requested that the Department prepare a Remediation Agreement which, when effective, will allow the transaction described in paragraph 2.A above to be consummated prior to the completion of all administrative and remediation requirements pursuant to ISRA.

5. By entering into this Remediation Agreement, Cardinal Health, Inc. neither admits to any fact, fault or liability under any statute or regulation concerning the condition of the Site nor waives any rights or defenses with regard to the Site except as specifically provided in this Remediation Agreement.

6. The scope of the remediation required by this Remediation Agreement includes all contaminants within the meaning of the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et seq., and the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq. (hereinafter "contaminants") at the above referenced Site, and all contaminants which are emanating from or which have emanated from the Site.

## AGREEMENT

### **I. Remedial Investigation Requirements**

1. Within ninety (90) calendar days after the effective date of this Remediation Agreement, as set forth in paragraph 66 below (hereinafter "the effective date of this Remediation Agreement"), or as otherwise approved in writing by the Department, Cardinal Health, Inc. agrees to submit to the Department a detailed Remedial Investigation Work Plan (hereinafter the "RI Work Plan") in accordance with N.J.A.C. 7:26E, including a schedule pursuant to N.J.A.C. 7:26E-4.2(b). Cardinal Health, Inc. agrees to include in the RI Work Plan a baseline ecological evaluation pursuant to N.J.A.C. 7:26E-3.11 and **all other work required by N.J.A.C. 7:26E-3.1 et seq.**, that the Department has not already approved for the Site.
2. Within thirty (30) calendar days after receipt of the Department's written comments on the RI Work Plan, or as otherwise approved in writing by the Department, Cardinal Health, Inc. agrees to modify the RI Work Plan to conform to the Department's comments and agrees to submit the modified RI Work Plan to the Department. The determination as to whether or not the modified RI Work Plan, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing. When the Department determines that the RI Work Plan conforms to the Technical Requirements for Site Remediation and the Department's comments, it shall send Cardinal Health, Inc. written final approval of the RI Work Plan.
3. Upon receipt of the Department's written final approval of the RI Work Plan, Cardinal Health, Inc. agrees to conduct the remedial investigation in accordance with the approved RI Work Plan and the schedule therein.
4. Cardinal Health, Inc. agrees to submit to the Department a Remedial Investigation Report (hereinafter "RI Report") in accordance with N.J.A.C. 7:26E and the RI Work Plan and the schedule therein.
5. If upon review of the RI Report the Department determines that additional remedial investigation is required, the Department shall notify Cardinal Health, Inc. of the additional work that is required. Cardinal Health, Inc. agrees to submit to the Department another RI Workplan and schedule for the additional work. Upon approval of the RI Workplan for the additional required work, Cardinal Health, Inc. agrees to conduct additional remedial investigation and submit another RI Report pursuant to the approved schedule.

6. Within thirty (30) calendar days after receipt of the Department's written comments on the RI Report, or longer as authorized by the Department, Cardinal Health, Inc. agrees to modify the RI Report to conform to the Department's comments and agrees to submit the modified RI Report to the Department. The determination as to whether or not the modified RI Report, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing. When the Department determines that the RI Report conforms to the Technical Requirements for Site Remediation and the Department's comments, it shall send Cardinal Health, Inc. written final approval of the RI Report.

## **II. Remedial Action Requirements**

7. Within ninety (90) calendar days after receipt of the Department's written approval of the RI Report, Cardinal Health, Inc. agrees to submit to the Department a Remedial Action Work Plan in accordance with N.J.A.C. 7:26E.

8. Within thirty (30) calendar days after receipt of the Department's written comments on the Remedial Action Work Plan, or as otherwise approved in writing by the Department, Cardinal Health, Inc. agrees to modify the Remedial Action Work Plan to conform to the Department's comments and agrees to submit the modified Remedial Action Work Plan to the Department. The determination as to whether or not the modified Remedial Action Work Plan, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing. When the Department determines that the RA Work Plan conforms to the Technical Requirements for Site Remediation and the Department's comments, it shall send Cardinal Health, Inc. written final approval of the RA Work Plan.

9. Upon receipt of the Department's written final approval of the Remedial Action Work Plan, Cardinal Health, Inc. agrees to implement the approved Remedial Action Work Plan in accordance with the schedule therein.

10. Cardinal Health, Inc. agrees to submit to the Department a Remedial Action Report (hereinafter "RA Report") in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, the RA Work Plan and the schedule therein.

11. If upon review of the RA Report the Department determines that additional remediation is required, Cardinal Health, Inc. agrees to conduct additional remediation as required by the Department including submission of additional workplans and reports, as applicable.

12. Within thirty (30) calendar days after receipt of the Department's written comments on the RA Report, or longer as authorized by the Department, Cardinal Health, Inc. agrees to modify the RA Report to conform the Department's comments, and agrees

to submit the modified RA Report to the Department. The determination as to whether or not the modified RA Report, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E and the Department's written comments, and is otherwise acceptable to the Department shall be made solely by the Department in writing. When the Department determines that the RA Report conforms to the Technical Requirements for Site Remediation and the Department's comments, it shall send Cardinal Health, Inc. written final approval of the RA Report.

### **III. Additional Remedial Investigation and Remedial Action**

13. If at any time that this Remediation Agreement is in effect the Department determines that the prevailing standards in N.J.A.C. 7:26E are not being achieved or that additional remediation is required to protect the public health and safety or the environment, Cardinal Health, Inc. agrees to conduct such additional remediation as the Department directs.

14. If the Department determines that no further action is required at the Site, Cardinal Health, Inc. shall submit a negative declaration, in accordance with N.J.A.C. 7:26B-6. 7, within thirty (30) calendar days or longer as authorized by the Department from receipt of the Department's request for the submission of the negative declaration.

### **IV. Progress Reports**

15. Cardinal Health, Inc. agrees to submit quarterly progress reports which detail the status of Cardinal Health, Inc.'s compliance with this Remediation Agreement to the Department in accordance with N.J.A.C. 7:26E-6.6. Cardinal Health, Inc. agrees to submit the first progress report on or before the last calendar day of the fourth calendar month following the effective date of this Remediation Agreement. Cardinal Health, Inc. agrees to submit a progress report thereafter on or before the last calendar day of the month following the next three calendar months being reported. Cardinal Health, Inc. may request that the Department allow progress reports to be submitted semi-annually or annually.

### **V. Project Coordination**

16. Cardinal Health, Inc. agrees to submit to the Department all documents required by this Remediation Agreement, including correspondence relating to force majeure issues pursuant to section IX. of this Agreement by delivery with an acknowledgment of receipt from the Department. The date that the Department executes the acknowledgment will be the date the Department uses to determine Cardinal Health, Inc.'s compliance with the requirements of this Remediation Agreement for purposes of assessing penalties and availing itself of any other applicable remedies.

17. Within seven (7) calendar days after the effective date of this Remediation Agreement, Cardinal Health, Inc. agrees to submit to the Department the name, title, address and telephone number of the individual who shall be Cardinal Health, Inc.'s



technical contact for the Department for all matters concerning this Remediation Agreement. In the event the Department determines that a meeting concerning the remediation of the Site is necessary, the Department will provide notification to Cardinal Health, Inc.'s agent, identified in paragraph 46 below of the date, time and place of such meeting. Cardinal Health, Inc. agrees to ensure that the agent is available for and participates in such meeting.

18. Within seven (7) days after the effective date of this Remediation Agreement the Department will identify the individual who will be the Department's contact for all matters concerning this Remediation Agreement. Unless the Department otherwise directs in writing, Cardinal Health, Inc. agrees to submit all payments and copies of all documents required by this Remediation Agreement to the Department's contact.

19. Cardinal Health, Inc. agrees to notify, both verbally and in writing, the Department's contact person identified pursuant to paragraph 18, above, at least fourteen (14) calendar days prior to the initiation of any field activities at the Site which are related to remediation, development or redevelopment.

20. The Department will consider a written request for an extension of time to perform any requirement under this Remediation Agreement, provided that Cardinal Health, Inc. submits any extension request to the Department two weeks prior to any applicable deadline to which the extension request refers.

#### **VI. Remediation Funding Source**

21. Cardinal Health, Inc. agrees to establish and maintain during the life of this Remediation Agreement a remediation funding source in an amount equal to the Department approved estimate of the remediation costs related to compliance with this Remediation Agreement, including all operation, maintenance and monitoring costs of all engineering and institutional controls, pursuant to N.J.A.C. 7:26E-8, used to remediate the Site, pursuant to N.J.A.C. 7:26C-7. Cardinal Health, Inc. agrees that the initial amount is \$100,000.00.

22. Cardinal Health, Inc. agrees to pay an **annual remediation funding source surcharge** if required to do so pursuant to N.J.A.C. 7:26C-7.8.

23. Beginning three hundred sixty-five (365) calendar days after the effective date of this Remediation Agreement, and annually thereafter on the same calendar day, Cardinal Health, Inc. agrees to submit to the Department a detailed review of all remediation costs expended by Cardinal Health, Inc. to comply with this Remediation Agreement, including:

(a) A detailed summary of all monies spent to date pursuant to this Remediation Agreement;

(b) The detailed estimated remediation costs required to comply with this Remediation Agreement, including all operation, maintenance and monitoring costs; and

(c) The reason for any changes from the previously submitted cost review.

24. At any time after Cardinal Health, Inc. submits the first cost review pursuant to the preceding paragraph, Cardinal Health, Inc. may request the Department's approval to reduce the amount of the remediation funding source to reflect the remaining remediation costs necessary to comply with obligations under this Remediation Agreement. If the Department grants written approval to such a request, Cardinal Health, Inc. may amend the amount of the then existing remediation funding source consistent with that approval.

25. If the estimated costs of meeting Cardinal Health, Inc.'s obligations in this Remediation Agreement at any time increase to an amount greater than the remediation funding source, Cardinal Health, Inc. agrees to, within thirty (30) calendar days after receipt of written notice of the Department's determination, increase the amount of the then existing remediation funding source or provide an additional remediation funding source such that the total amount equals the Department's approved estimated cost.

26. If Cardinal Health, Inc. remediates the Site to a restricted use remediation standard and Cardinal Health, Inc. implements institutional and engineering controls, Cardinal Health, Inc. shall maintain the remediation funding source, pursuant to N.J.A.C. 7:26C-7, in an amount necessary to pay for the maintenance of the engineering and institutional controls.

## **VII. Oversight Cost Reimbursement**

27. All submissions required pursuant to this Remediation Agreement shall be accompanied by all appropriate fees pursuant to N.J.A.C. 7:26B-8.

28. Within thirty (30) calendar days after receipt from the Department of a written summary of the Department's oversight costs, including all accrued interest incurred pursuant to paragraph 30 below, determined pursuant to N.J.A.C. 7:26B-8, Cardinal Health, Inc. agrees to submit to the Department a cashier's or certified check payable to the "Treasurer, State of New Jersey" and submitted with DEP Form 062A, for the full amount of the Department's oversight costs, for the period invoiced in the Department's summary.

29. Cardinal Health, Inc. agrees that its agreement here to pay the Department's oversight costs will continue after the Department's termination of this Remediation

Agreement as provided herein for those oversight costs that have accrued prior to that termination.

30. Cardinal Health, Inc. also agrees to pay interest on the unpaid balance of oversight costs, beginning at the end of the thirty (30) calendar day period established in paragraph 28, above, at the rate established by Rule 4:42 of the current edition of the Rules Governing the Courts of the State of New Jersey.

#### **VIII. Reservation of Rights**

31. The Department reserves the right to unilaterally terminate this Remediation Agreement in the event that the Department determines that Cardinal Health, Inc. has violated the terms of this Remediation Agreement. Before the Department unilaterally terminates this Remediation Agreement, the Department shall notify Cardinal Health, Inc. in writing of the obligation(s) which it has not performed, and Cardinal Health, Inc. shall have thirty (30) calendar days after receipt of such notice to perform such obligation(s).

32. Nothing in this Remediation Agreement precludes the Department from seeking civil or civil administrative penalties or any other legal or equitable relief against Cardinal Health, Inc. for violations of this Remediation Agreement. In any such action brought by the Department under this Remediation Agreement for injunctive relief, civil, or civil administrative penalties, Cardinal Health, Inc. may raise, among other defenses, a defense that Cardinal Health, Inc. failed to comply with a decision of the Department, made pursuant to this Remediation Agreement, on the basis that the Department's decision was arbitrary, capricious or unreasonable. If Cardinal Health, Inc. is successful in establishing such a defense based on the administrative record, Cardinal Health, Inc. shall not be liable for penalties for failure to comply with that particular requirement of the Remediation Agreement. Although Cardinal Health, Inc. may raise such defenses in any action initiated by the Department for injunctive relief, Cardinal Health, Inc. hereby agrees not to otherwise seek review of any decision made or to be made by the Department pursuant to this Remediation Agreement, except as provide in paragraph 45 of this Agreement. Under no circumstances shall Cardinal Health, Inc. initiate any action or proceeding challenging any decision made or to be made by the Department pursuant to this Remediation Agreement.

33. This Remediation Agreement shall not be constructed to affect or waive the claims of Federal or State natural resources trustees against any person for damages or injury to, destruction of, or loss of natural resources, unless expressly provided herein, and then only to the extent expressly provided herein.

34. Except as otherwise stated in this Remediation Agreement, nothing herein shall be construed as limiting any legal, equitable or administrative remedies which Cardinal Health, Inc. may have under any applicable law or regulation. In any enforcement action the Department initiates pursuant to this Remediation Agreement, Cardinal Health, Inc. reserves any defenses which the Spill Compensation and Control Act, *Matter of Kimber*

*Petroleum Corp.*, 110 N.J. 69 (1988) or their amendments, supplements and progeny allow.

35. Except as otherwise set forth herein, by the execution of this Remediation Agreement, it does not release Cardinal Health, Inc., from any liabilities or obligations Cardinal Health, Inc. may have pursuant to any other authority, nor does the Department waive any of its rights or remedies pursuant thereto.

36. Nothing in this Remediation Agreement shall be construed to limit, restrict or prohibit any person(s) responsible for conducting the remediation of the Site from implementing any applicable ISRA compliance options in accordance with N.J.A.C. 7:26B-5 to satisfy the requirements of ISRA.

37. Notwithstanding any other provision of this Remediation Agreement, the Department is not barred from, the Department reserves, and this Remediation Agreement is without prejudice to, the right to institute proceedings or to issue administrative orders seeking injunctive relief, penalties, damages or any other remedies authorized by law for past, present or future violations of any statute, regulation or order.

38. This Remediation Agreement does not pertain to matters other than the future remediation of the contaminated Site by Cardinal Health, Inc. The Department reserves, and this Remediation Agreement is without prejudice to, all rights against Cardinal Health, Inc. and anyone else concerning all other matters, including the following:

- (a) Liability arising from the past, present or future discharge or unsatisfactory storage or containment of any hazardous substance outside the contaminated Site;
- (b) Liability for any future discharge or unsatisfactory storage or containment of any hazardous substance at the contaminated Site, other than as provided for in this Remediation Agreement or as otherwise ordered by the Department;
- (c) Criminal liability;
- (d) Liability for any violation of any law that occurred prior to or occurs after the effective date of this Remediation Agreement;
- (e) Liability for any claim against the New Jersey Spill Compensation Fund;  
and
- (f) Penalties for past acts or failure to act.

#### **IX. Force Majeure**

39. If any event specified in the following paragraph occurs which Cardinal Health, Inc. believes or should believe will or may cause delay in the compliance or cause non-

compliance with any provision of this Remediation Agreement, Cardinal Health, Inc. shall notify the Department in writing within seven (7) calendar days of the start of delay or knowledge of the anticipated delay, as appropriate, referencing this paragraph and describing the anticipated length of the delay, the precise cause or causes of the delay, any measures taken or to be taken to minimize the delay, and the time required to take any such measures to minimize the delay. Cardinal Health, Inc. shall take all necessary action to prevent or minimize any such delay.

40. The Department will extend in writing the time for compliance for a period no longer than the delay resulting from such circumstances as determined by the Department only if:

- (a) Cardinal Health, Inc. has complied with the notice requirements of the preceding paragraph;
- (b) Any delay or anticipated delay has been or will be caused by fire, flood, riot, strike or other circumstances beyond the control of Cardinal Health, Inc.; and
- (c) Cardinal Health, Inc. has taken all necessary action to prevent or minimize any such delay.

41. The burden of proving that any delay is caused by circumstances beyond the control of Cardinal Health, Inc. and the length of any such delay attributable to those circumstances shall rest with Cardinal Health, Inc.

42. "Force Majeure" shall not include the following:

- (a) Delay in an interim requirement with respect to the attainment of subsequent requirements;
- (b) Increases in the cost or expenses incurred by Cardinal Health, Inc. in fulfilling the requirements of this Remediation Agreement;
- (c) Contractor's breach, unless Cardinal Health, Inc. demonstrates that such breach falls within paragraph 40 above; and
- (d) Failure to obtain access required to implement this Remediation Agreement, unless denied by a court of competent jurisdiction.

## **X. Penalties**

43. Cardinal Health, Inc. agrees to pay penalties for its violations of this Remediation Agreement, or for its failure to implement and maintain institutional controls including, by way of example, a deed notice or declaration of environmental restriction that are part of a remedial action implemented pursuant to this Remediation Agreement order, according to the amounts and conditions in N.J.A.C. 7:26C-10.

44. Cardinal Health, Inc. agrees that its payments of a penalty pursuant to this Remediation Agreement does not alter Cardinal Health, Inc.'s responsibility to complete any requirement of this Remediation Agreement.

## **XI. Dispute Resolution**

45. In the event a conflict arises between Cardinal Health, Inc. and the Department, Cardinal Health, Inc. may initiate the Department's dispute resolution process at N.J.A.C. 7:26C-1.4.

## **XII. General Provisions**

46. Cardinal Health, Inc. agrees that the person listed below is Cardinal Health, Inc.'s agent for the purpose of service for all matters concerning this Remediation Agreement unless and until Cardinal Health, Inc. provides the Department with the name, title, address, and telephone number of Cardinal Health, Inc.'s new agent.

Name:	Michael Austin Smith
Company:	Drinker Biddle & Reath LLP
Address:	500 Campus Drive Florham Park, New Jersey 07932-1047
Telephone No.:	(973) 549-7042

47. In addition to the Department's statutory and regulatory rights to enter and inspect, Cardinal Health, Inc. agrees to allow the Department and its authorized representatives access to all areas of the Site to which Cardinal Health, Inc. has access, at all times, for the purpose of monitoring Cardinal Health, Inc.'s compliance with this Remediation Agreement and/or to perform any remedial activities Cardinal Health, Inc. fails to perform as required by this Remediation Agreement. Cardinal Health, Inc. agrees that the Department's right of access pursuant to this paragraph shall continue after the Department's termination of this Remediation Agreement pursuant to paragraph 31, above.

48. Cardinal Health, Inc. agrees to not construe any informal advice, guidance, suggestions, or comments by the Department, or by persons acting on behalf of the Department, as relieving Cardinal Health, Inc. of its obligation to obtain written approvals as required herein.

49. Cardinal Health, Inc. agrees to provide a copy of this Remediation Agreement to each contractor and subcontractor retained to perform the work required by this Remediation Agreement and agrees to condition all contracts and subcontracts entered for the performance of such work upon compliance with the terms and conditions of this

Remediation Agreement. Cardinal Health, Inc. agrees to be responsible to the Department for ensuring that its contractors and subcontractors perform the work herein in accordance with this Remediation Agreement.

50. Nothing in this Remediation Agreement relieves Cardinal Health, Inc. from complying with all other applicable laws and regulations. Compliance with the terms of this Remediation Agreement shall not excuse Cardinal Health, Inc. from obtaining and complying with any applicable federal, state or local permits, statutes, regulations and/or orders while carrying out the obligations imposed by this Remediation Agreement. This Remediation Agreement shall not preclude the Department from requiring that Cardinal Health, Inc. obtain and comply with any permits, and/or orders issued by the Department under the authority of the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq., for the matters covered herein. The terms and conditions of any such permit shall not be preempted by the terms and conditions of this Remediation Agreement if the terms and conditions of any such permit are more stringent than the terms and conditions of this Remediation Agreement. Should any of the measures to be taken by Cardinal Health, Inc. during the remediation of any ground water and surface water pollution result in a new or modified discharge as defined in the New Jersey Pollutant Discharge Elimination System (NJPDES) regulations, N.J.A.C. 7:14A-1 et seq., then Cardinal Health, Inc. agrees to obtain a NJPDES permit or permit modification from the Department prior to commencement of the activity.

51. All work plans, schedules, and other documents required by this Remediation Agreement and approved in writing by the Department are incorporated herein and made a part hereof.

52. Upon the receipt of a written request from the Department, Cardinal Health, Inc. agrees to submit to the Department all data and information, including technical records and contractual documents, concerning contamination at the Site, including raw sampling and monitoring data, whether or not such data and information, including technical records and contractual documents, were developed pursuant to this Remediation Agreement. Cardinal Health, Inc. reserves its right to assert a privilege regarding such documents, but agrees not to assert any confidentiality or privilege claim with respect to any data related to Site conditions, sampling or monitoring.

53. No modification or waiver of this Remediation Agreement shall be valid except by written amendment to this Remediation Agreement duly executed by Cardinal Health, Inc. and the Department. Any amendment to this Remediation Agreement shall be executed by the Department and Cardinal Health, Inc. The Department reserves the right to require the resolution of any outstanding violations of the applicable regulations or this Remediation Agreement prior to executing any such amendment.

54. Cardinal Health, Inc. waives its rights to an administrative hearing concerning the entry of this Remediation Agreement.

55. This Remediation Agreement shall be governed and interpreted under the laws of the State of New Jersey.

56. If any provision of this Remediation Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Remediation Agreement or the application of such provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each provision of this Remediation Agreement shall be valid and enforced to the fullest extent permitted by law.

57. This Remediation Agreement represents the entire integrated agreement between the Department and Cardinal Health, Inc. concerning the Site subject to this Remediation Agreement and supersedes all prior negotiations, representations or agreements, either written or oral, unless otherwise specifically provided herein.

58. Within thirty (30) calendar days after the effective date of this Remediation Agreement, Cardinal Health, Inc. agrees to record a copy of this Remediation Agreement with the County Clerk, Somerset County, State of New Jersey and agrees to provide the Department with written verification of compliance with this paragraph which shall include a copy of this Remediation Agreement stamped "Filed" by the County Clerk.

59. This Remediation Agreement shall be binding, jointly and severally, on each party, its successors, assignees and any trustee in bankruptcy or receiver appointed pursuant to a proceeding in law or equity. No change in the ownership or corporate status of any party or of the industrial establishment or Site shall alter party's responsibilities under this Remediation Agreement.

60. Cardinal Health, Inc.'s document retention policy notwithstanding, Cardinal Health, Inc. agrees to preserve, during the pendency of this Remediation Agreement and for a minimum of ten (10) years after its termination, all data and information, including technical records, potential evidentiary documentation and contractual documents, in its possession or in the possession of Cardinal Health, Inc.'s divisions, employees, agents, accountants, contractors, or attorneys that relate in any way to the contamination at the Site. After this ten year period, Cardinal Health, Inc. may make a written request to the Department to discard any such documents. Such a request shall be accompanied by a description of the documents involved, including the name of each document, date, name, and title of the sender and receiver and a statement of contents. Upon receipt of written approval by the Department, Cardinal Health, Inc. may discard only those documents that the Department does not require to be preserved for a longer period. Upon receipt of a written request by the Department, Cardinal Health, Inc. agrees to submit to the Department all data and information, including technical records and contractual documents or copies of the same. Cardinal Health, Inc. reserves whatever rights it may have, if any, to assert any privilege regarding such data or information, however, Cardinal Health, Inc. agrees not to assert any privilege or confidentiality claims with respect to data related to Site conditions, sampling, or monitoring.



61. Cardinal Health, Inc. agrees to provide to the Department written notice of the dissolution of its corporate or partnership identity, the liquidation of the majority of its assets or the closure, termination or transfer of operations in accordance with the schedule set forth at N.J.A.C. 7:26B-3.2 prior to such action. Upon such notice, Cardinal Health, Inc. agrees to submit a cost review pursuant to this Remediation Agreement to the Department. Cardinal Health, Inc. agrees to also provide written notice to the Department of a filing of a petition for bankruptcy no later than the first business day after such filing. These requirements shall be in addition to any other statutory requirements arising from the dissolution of corporate or partnership identity, the liquidation of the majority of assets, or the closure, termination or transfer of operations. Upon receipt of notice of dissolution of corporate identity, liquidation of assets or filing of a petition for bankruptcy, the Department may request and, within fourteen (14) days of the Department's written request, the Cardinal Health, Inc. agrees to obtain and submit to the Department additional financial assurance pursuant to this Remediation Agreement.

62. If Cardinal Health, Inc. remediates the Site to a restricted use standard as defined in N.J.A.C. 7:26E-1.8 and Cardinal Health, Inc. implements institutional and engineering controls, this Remediation Agreement shall remain in full force and effect including the requirements to maintain a remediation funding source, and to pay an annual 1% surcharge of the total amount of the remediation funding source until the Department determines that the Site is remediated to the applicable unrestricted use standard.

63. If Cardinal Health, Inc. remediates contaminated soil at the Site to the Department's unrestricted use soil standard as defined at N.J.A.C. 7:26E-1.8, and any other contaminated media to the applicable remediation standard, the requirements of this Remediation Agreement shall be deemed satisfied upon the receipt by Cardinal Health, Inc. of written notice from the Department stating that Cardinal Health, Inc. has completed the remediation required by this Remediation Agreement in accordance with N.J.A.C. 7:26E and has satisfied all financial obligations imposed by this Remediation Agreement and therefore Cardinal Health, Inc. does not need to continue to maintain a remediation funding source or pay the annual 1% surcharge, and that no further action is necessary at the Site. The written notice shall also state that the Remediation Agreement is thereby terminated. Such written notice shall not relieve Cardinal Health, Inc. from the obligation to conduct future investigation or remediation activities pursuant to Federal, State or local laws for matters not addressed by this Remediation Agreement.

64. Except as provided in paragraph 52 above, Cardinal Health, Inc. may assert a claim of confidentiality for any information submitted by Cardinal Health, Inc. pursuant to this Remediation Agreement, by following the Department's procedures in N.J.A.C. 7:26B-7.

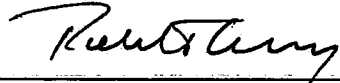
65. Cardinal Health, Inc. agrees to submit to the Department, one copy of the executed original Remediation Agreement, with the original signature of Cardinal Health, Inc. or its authorized representative, and documentary evidence such as a corporate resolution, or a certification by a corporate officer, that the signatory has the authority to

bind Cardinal Health, Inc. to the terms of this Remediation Agreement, and proof that the remediation funding source has been established pursuant to N.J.A.C. 7:26C-7.

66. This Remediation Agreement shall be effective upon the execution of this Remediation Agreement by the Department and Cardinal Health, Inc.

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Date: 8-9-07

By:   
Ronald T. Corcory, Assistant Director  
Oversight Resources Allocation Element

**CARDINAL HEALTH, INC.**

Date: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
Print Full Name Signed Above

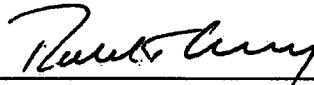
\_\_\_\_\_  
Title

bind Cardinal Health, Inc. to the terms of this Remediation Agreement, and proof that the remediation funding source has been established pursuant to N.J.A.C. 7:26C-7.

66. This Remediation Agreement shall be effective upon the execution of this Remediation Agreement by the Department and Cardinal Health, Inc.

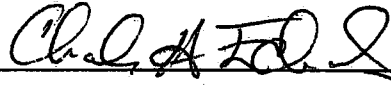
**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Date: 4-9-07

By:   
Ronald T. Corcory, Assistant Director  
Oversight Resources Allocation Element

**CARDINAL HEALTH, INC.**

Date: 4/10/07

By: 

CHARLES A. ECHOL  
Print Full Name Signed Above

VP, ENVIRONMENT, HEALTH & SAFETY  
Title

Acknowledgement of Signature

State of Ohio

County of Delaware

On this 10<sup>th</sup> day of April, 2007, before me, the undersigned, personally appeared Charles Echols, the Vice President Corporate Environmental, Health and Safety, who, I am satisfied, is the person who signed the forgoing instrument, and he did acknowledge under oath that he signed and delivered the same as Vice President of Cardinal Health, Inc., that he was authorized to execute the same on behalf of Cardinal Health, Inc., and that the foregoing instrument is the voluntary act and deed of Cardinal Health, Inc., made by virtue of proper authority.

Kristen D. Miller  
Signature of Notary/Seal



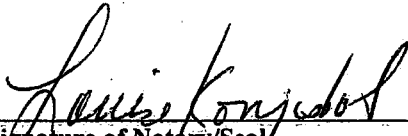
KRISTEEN D. MILLER  
Notary Public, State of Ohio  
My Commission Expires 02-17-09

ACKNOWLEDGEMENT OF SIGNATURE

State of New Jersey

County of Mercer

On this 9th day of April 2007, before me, the undersigned, personally appeared Ronald T. Corcoran, the Assistant Director of the Oversight Resources Allocation Element of the New Jersey Department of Environmental Protection, who, I am satisfied, is the person who signed the foregoing instrument, and he did acknowledge under oath that he signed and delivered the same in his capacity as such official, that he was authorized to execute the same on behalf of the New Jersey Department of Environmental Protection, and that the foregoing instrument is the voluntary act and deed of the New Jersey Department of Environmental Protection, made by virtue of proper authority.

  
Signature of Notary/Seal

**Louise Konjushok**  
**Notary Public of New Jersey**  
**My Commission Expires Aug. 10, 2008**

**ATTACHMENT L**

1/2006

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF REMEDIATION SUPPORT  
P.O. Box 435, TRENTON, NJ 08625-0435

PRELIMINARY ASSESSMENT REPORT

Answer all questions. Should you encounter any problems in completing this form, we recommend that you discuss the matter with a representative from the Site Remediation Program. Submitting incorrect or insufficient data may cause processing delays and possible postponement of your transaction

PLEASE PRINT OR TYPE

Date: August 1, 2007

Industrial Establishment/Site Name Cardinal Health 406, LLC

Address 14 Schoolhouse Road

City or Town Franklin Township Zip Code 08873

Municipality Franklin Township County Somerset

Block (s) 514 Lots (s) 20.04

Site Remediation Program Case Number or EPA Identification Number E20070038

1. Present a history of ownership and operations at the industrial establishment, in tabular form, from the time the site was naturally vegetated or utilized as farmland in accordance with N.J.A.C. 7:26E-3.1(c)1.ii. (attach additional sheets as necessary)

Name of Property Owner	From	To
Refer to Appendix A		

Name of Operator	From	To
Cardinal Health	4/17/00	Present
Unoccupied	December 1990	4/17/00
SGS-Thomson Microelectronics, Inc.	10/10/89	December 1990
Microwave Semiconductor Corporation	1969	June 1989
Vacant Land	Prior to 1969	1972

2A. In accordance with N.J.A.C. 7:26E-3.1(c)1.i, provide a clear and concise description of the past industrial/commercial operation(s) conducted on site by each owner and operator. To the extent available the site history shall include an evaluation of the following sources of information:

(1) Sanborn Fire Insurance Maps; (2) MacRae's Industrial Directory, New Jersey Industrial Directory, New Jersey Manufacturers Directory; (3) Title and Deed; (4) Site plans and facility as-built drawings; (5) federal, state, county and local government files; (6) The Department Geographic Information System. (7) and any additional sources which may be available for a specific site.

Site history is frequently an item where preliminary assessments are incomplete. The Industrial Site Recovery Act requires that a diligent inquiry be made, researching the site history back to January 1, 1932. Common answers to this question have included: "Unknown", or "We are only a tenant on the site and have no knowledge of prior site history". Neither of these answers satisfies the requirement for a due diligent inquiry.

To avoid having a PA found incomplete by the Department due to insufficient information, the site history must be researched. The following are ways of obtaining information regarding site history: title searches; contacting the local and county health officials and municipal agencies (for example, local fire and police departments; and local planning, zoning, adjustment boards) requesting any information these public agencies may have on the specific location; and, interviewing long time neighbors of the industrial establishment. Tenants should always request information from the landlord. The applicant should always document any attempts to locate this information to support a claim that a diligent inquiry has been conducted. The Preliminary Assessment report should not be submitted until all parties contacted for information have responded to the request for information and the information obtained has been reviewed. If the prior site history demonstrates that the current building was built on vacant unimproved property, it should be reported as such. If the site has been, or is now the subject of a site remediation, any prior cases should always be referenced.

Provide the page or appendix number where the site history may be found. Appendix B

Provide a listing of the resources utilized to compile the site history and as appropriate copies of any maps or information, which will assist the Department in evaluating your conclusions.

Name of Resource	Date of document reviewed	Appendix # if providing copies
Historical Chain of Title Report	3/5/07	A
NJDEP Site Evaluation Submission, ECRA Case No. 88B51	11/17/88	N/A
NJDEP Site Evaluation Submission, ECRA Case No. 89560	7/17/89	N/A
NJDEP Site Evaluation Submission, ECRA Case No. 90617	8/14/90	N/A
EDR Aerial Photo Decade Package	2/14/07	G

2B. Include a detailed description of the most recent operations subject to this preliminary assessment.

Provide the page or appendix # where the description of the most recent operations may be found.  
Appendix C

3. Hazardous Substance/Waste Inventory: N.J.A.C. 7:26E-3.1(c)1.iii. List all raw materials, finished-products, formulations and hazardous substances, hazardous wastes, hazardous constituents and pollutants, including intermediates and by-products that are or were historically present on the site. Note: If past usage included farming, pesticides may be a concern and should be included in this list. (Attach additional sheets if necessary).

Material Name	CAS # if known	Typical annual usage (gallons/lbs.)	Storage method (i.e. Drum, tank, jars)
Appendix D			



- 4 A. In accordance with N.J. C. 7:26E-3.1(c)1iv provide a summary of all current and historic wastewater discharges of Sanitary and/or Industrial Waste and/or Sanitary sludge. Present and past production processes, including dates and their respective water use shall be identified and evaluated, including ultimate and potential discharge and disposal points and how and where materials are or were received on-site. All discharge and disposal points shall be clearly depicted on a scaled site map. Information required under this item is intended to identify potential discharges to any on-site disposal system, such as a septic system or lagoon or drywell. For example to complete the following table information may include: From 1955 To 1960, Discharge Type - Sanitary and Industrial, Discharge Location - On-Site Septic System: From 1960 To Present, Discharge Type - Sanitary and Industrial, Discharge Location - Public Treatments Works.

### Site Information

Discharge Period		Discharge Type	Discharge Location
From	To		
1969	Present	Sanitary & Industrial	POTW
Pre-1969	1969	None generated	N/A

- 4B. In accordance with N.J.A.C 7:26E-3.1(c)iv provide a narrative of disposal processes for all historic and current process waste streams and disposal points. (attach additional sheets if necessary)

### Appendix E

5. This question requires the applicant to conduct a diligent inquiry into the current and historic operations at the site to identify all of the potential areas of concern, which formerly or currently exists at the industrial establishment as defined in N.J.A.C. 7:26E-1.8.

Diligent inquiry as defined in N.J.A.C.7:26E-1.8 states:

A. Conducting a diligent search of all documents which are reasonably likely to contain information related to the object of the inquiry, which documents are in such person's possession, custody or control, or in the possession, custody or control of any other person from whom the person conducting the search has a legal right to obtain such documents; and

B. Making reasonable inquiries of current and former employees and agents whose duties include or included any responsibility for hazardous substances, hazardous wastes, hazardous constituents, or pollutants, and any other current and former employees or agents who may have knowledge or documents relevant to the inquiry.

In accordance with N.J.A.C. 7:26E3.1(c)1.v., a narrative shall be provided for each area of environmental concern describing the (A) Type; (B) Age; (C) Dimensions of each container/area; (D) Chemical Content; (E) Volume; (F) Construction materials; (G) Location; (H) Integrity (i.e., tank test reports, description of drum storage pad); and (I) Inventory control records, unless a Department-approved leak detection system, pursuant to N.J.A.C. 7:1E or 7:14B, has always been in place and there is no discharge history. If sampling is not proposed for any identified area of environmental concern, please explain why it is believed that the area of environmental concern does not contain contaminants above the applicable remediation standards. Submit all necessary documentation to verify this belief. The required narrative need not describe the sampling to be completed; however, it should state that sampling will be completed in accordance with the appropriate section of N.J.A.C.7:26E.

Detailed descriptions of all sampling completed in each area of concern shall be described as part of a Site Investigation Report in accordance with N.J.A.C.7:26E-3.13.

Please indicate if any of the potential areas of environmental concern listed below in #5A through #5G, as defined in N.J.A.C. 7:26E-1.8, formerly or currently exist at the industrial establishment by indicating Yes or No in the appropriate space as provided.

For the Location References Keyed to Site Map, use either a unique number or a unique letter identification for each area of concern and be consistent throughout each phase of the remediation, referring to the same identification provided herein. Note: If the industrial establishment has multiple locations for one type of area of concern (example: underground storage tanks [UST] are located in 3 separate areas of the facility), each area must be discussed separately and given a separate identification. For example: Area A-1 a 1,000 gallon gasoline UST, Area A-2 a 10,000 gallon heating oil UST and Area A-3 a 500 gallon TCE UST should all be listed on the site maps and have separate narratives provided for each area discussing required information A-I listed above for each UST area.

Provide the required narrative as an appendix to this report. Do not try to provide a narrative in the space provided

I hereby certify that a diligent inquiry has been conducted to identify all current and historical potential areas of environmental concern and based on the diligent inquiry the areas of environmental concern identified below in question 5A through 5G are the only areas of environmental concern believed to exist at the above referenced industrial establishment.

The signatory on the certification page shall initial here.   *CP*

**A. Bulk Storage Tanks and Appurtenances, including, without limitation :**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Aboveground Storage Tanks and Associated Piping	Yes	AOC-1	F
Underground Storage tanks and Associated Piping	Yes	AOC-2A & AOC-2B	F
Silos	No	N/A	N/A
Rail Cars	No	N/A	N/A
Loading and unloading areas	Yes	AOC-3A & AOC-3B	F
Piping, above ground and below ground pumping stations, sumps and pits	No	N/A	N/A

**B. Storage and Staging Areas, including**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Storage pads including drum and/or waste storage	Yes	AOC-4A, AOC-4B, & AOC-4C	F
Surface impoundments and lagoons	No	N/A	N/A
Dumpsters	Yes	AOC-5A & AOC-5B	F
Chemical storage cabinets or closets	Yes	AOC-6	F

**C. Drainage systems and areas including without limitation**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Floor drains, trenches and piping and sumps	No	N/A	N/A
Process area sinks and piping which receive process waste	No	N/A	N/A
Roof leaders when process operations vent to the roof	No	N/A	N/A
Drainage swales & culverts	No	N/A	N/A
Storm sewer collection systems	Yes	AOC-7	F
Storm water detention ponds and fire ponds	Yes	AOC-7	F
Surface water bodies	No	N/A	N/A
Septic systems leachfields or seepage pits	No	N/A	N/A
Drywells and sumps	No	N/A	N/A

**D. Discharge and disposal areas, including, without limitation:**

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Areas of discharge per N.J.A.C. 7:1E	Yes	AOC-8	F
Waste piles as defined by N.J.A.C. 7:26	No	N/A	N/A
Waste water collection systems including septic systems, seepage pits, & dry wells.	No	N/A	N/A
Landfills or landfarms	No	N/A	N/A
Sprayfields	No	N/A	N/A
Incinerators	No	N/A	N/A
Historic Fill or any other Fill material	No	N/A	N/A
Open Pipe discharges	No	N/A	N/A

**E. Other areas of concern, including, without limitation:**

<b>Area of Concern</b>	<b>Currently or Formerly Exists at the Site Yes/No</b>	<b>Location Referenced to the Site Map</b>	<b>Appendix Number</b>
Electrical Transformers & Capacitors	Yes	AOC-9	F
Hazardous material storage or handling areas	Yes	AOC-4A, AOC-4B, & AOC-4C	F
Waste Treatment areas	Yes	AOC-10	F
Discolored or spill areas	No	N/A	N/A
Open areas away from production areas	No	N/A	N/A
Areas of stressed vegetation	No	N/A	N/A
Underground piping including industrial process sewers	No	N/A	N/A
Compressor vent discharges	Yes	AOC-11	F
Non-contact cooling water discharges	No	N/A	N/A
Areas which receive flood or storm water from potentially contaminated areas	No	N/A	N/A
Active or Inactive production wells	No	N/A	N/A

**F. Building interior areas with a potential for discharge to the environment, including, without limitation:**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Loading or Transfer areas	Yes	AOC-3A & AOC-3B	F
Waste Treatment areas	No	AOC-10	F
Boiler rooms	No	N/A	N/A
Air vents and ducts	Yes	AOC-12	F
Hazardous material storage or handling areas	Yes	AOC-4A, AOC-4B, & AOC-4C	F

**G. Any other site-specific area of concern.**

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
N/A			

- 6 If the site area exceeds two acres, an interpretation of the aerial photographic history of the site shall be submitted in accordance with N.J.A.C. 7:26E-3.1(c)1.vi. The interpretation shall focus on the site under review and if any concerns were identified on the site. References to surrounding properties are unnecessary unless a neighboring site is suspected to be directly contributing to environmental factors at the site of concern. The interpretation shall be based on available current and historical color, black and white and infrared aerial photographs (scale 1:18,000 or less) of the site and surrounding area at a frequency that provides the evaluator with a historical perspective of site activities. The photographic history shall date back to 1932 or the earliest photograph available. Aerial photographs are available for review at the New Jersey Department of Environmental Protection, Tidelands Management Program, Aerial Photo Library, 9 Ewing Street, Trenton, New Jersey, (609) 633-7369. Note, the applicant is not required to provide the Department with copies of the aerial photographs reviewed only an interpretation of what was observed in each photograph, which may represent an environmental concern. If photos are submitted please clearly identify the location of the site on each photo.

\_\_\_\_\_ Check here if an aerial photo review was not completed and provide a reason.

Provide the appendix number for the air photo review narratives G

7. Discharge History of Hazardous Substances and Wastes, N.J.A.C. 7:26-3.1(c)1vii :

A. Have there been any known discharges of hazardous substances and wastes at the site?

\_\_\_\_\_ No (Go to question #8) ☒ Yes (Complete Items 7B & 7C)

B. Was the Department notified of the discharge?

☒ Yes; \_\_\_\_\_ No

If yes, provide the Case # 06-08-21-1610-29

C. Was a no-further-action letter, negative-declaration approval or full-compliance letter issued as a result of the cleanup of this discharge?

\_\_\_\_\_ Yes (Submit a copy of the no-further-action approval )

☒ No \*Formal letter not received from NJDEP. No supplemental response was requested after notification of spill.

8 In accordance with N.J.A.C.7:26E-3.1 (c) 1.viii, provide a description of any remediation activities previously conducted or currently underway at the site, including dates of discharges, remedial actions taken, and all existing sample results concerning contaminants which remain at the site. Copies of Department or other governmental agency no-further-action approvals should also be provided with a description of the areas to which the no-further-action approvals apply. This information is especially important if the approval was granted for the remediation of a portion of a site or a specific discharge event rather than the entire site subject to this preliminary assessment.

\_\_\_\_\_ Check here if this question does not apply.

Provide the appendix number for the required narrative and data summary H

9. Protectiveness of past remedies N.J.A.C. 7:26E-3.1(c) 1.ix. The owner or operator shall evaluate all remedies previously approved by the Department in a remedial action workplan or equivalent document to determine if the remedy remains protective of public health, safety and the environment. Things to consider as part of this evaluation include but are not limited to; was an engineering control used to cap contamination left on site? If yes, is this cap being maintained? Did the remedy address all of the contamination? Is the remedy working as designed? Have institutional controls been maintained at the local and county level? Please provide a page or appendix number where this written evaluation is included H.

10. Order of Magnitude Analysis, N.J.A.C. 7:26E, 3.2(a)5

A. Have any areas of concern previously received a No-Further-Action approval from the Department or other equivalent government agency for which no additional remediation is proposed? \_\_\_\_\_ No ( go to question #11). ☒ Yes ( complete 10B).

B. In accordance with N.J.S.A 58:10B-13(e) and N.J.A.C. 7:26E, 3.2(a)5 the following evaluation of the protectiveness of past remedies shall be completed for all areas of concern for which no further action was previously approved by the Department or other equivalent government agency and for which no additional remediation is proposed. All final sampling results shall be evaluated to determine if contaminant levels remaining on site are in compliance with current remediation criteria. The applicant shall complete the following :

I hereby certify that the order of magnitude analysis required pursuant to N.J.A.C. 7:26E has been completed, since the issuance of a No-Further-Action approval, negative declaration approval or equivalent remediation approval; and (Check the appropriate statements (1), (2), (3) or (4), complete the summary table and provide a summary of the results comparison)

(1) \_\_\_\_ The areas of concern listed below contain contaminants above the current numerical remediation standard applicable at the time of the comparison, however no further action is required because: (check the appropriate sub statement)

\_\_\_\_ (a) The contaminant concentrations remaining in the areas of concern listed below are less than an order of magnitude (factor of 10) greater than the current numerical remediation standard applicable at the time of the comparison;

\_\_\_\_ (b) The areas of concern or the site was remediated using engineering and institutional controls approved by the Department and these controls are still protective of public health, safety and the environment; or

\_\_\_\_ (c) The area of concern or the site was remediated to an approved site specific remediation standard and all of the factors and assumptions which are the basis for deriving the site specific remediation standard remain valid for the site.

Please list the areas of concern for which the previous statement applies.

Area of Concern	Location Reference Keyed to the Site Map

Include a separate table comparing the levels of contaminants remaining in each area of concern, the numerical remediation standard approved in the remedial action workplan or at the time of no-further-action approval and the current numerical remediation standards applicable at the time of the comparison. The table shall contain all sampling results, including sample location (depth), sample media, field and laboratory identification numbers, and method detection limits, as necessary, and analytical results for all individual contaminants for each area of concern.

(2) \_\_\_\_ The areas of concern listed below contain contaminants above the current numerical remediation standard applicable at the time of the comparison and further remediation is required because: (check the appropriate sub statement)

\_\_\_\_ (a) The contaminant concentrations remaining in the areas of concern listed below are more than an order of magnitude (factor of 10) greater than the current numerical remediation standard applicable at the time of the comparison;

\_\_\_\_ (b) The areas of concern or the site was remediated using engineering and institutional controls approved by the Department and these controls are no longer protective of public health, safety and the environment; or

\_\_\_\_ (c) The area of concern or the site was remediated to an approved site specific remediation standard and some or all of the factors and assumptions which are the basis for deriving the site specific remediation standard are no longer valid;

Please list the areas of concern for which the previous statement applies.

Area of Concern	Location Reference Keyed to the Site Map

Include a separate table comparing the levels of contaminants remaining in each area of concern, the numerical remediation standard approved in the remedial action workplan or at the time of no-further-action approval and the current numerical remediation standards applicable at the time of the comparison. The table shall contain all sampling results, including sample location (depth), sample media, field and laboratory identification numbers, and method detection limits, as necessary, and analytical results for all individual contaminants for each area of concern.

(3) ☒ The areas of concern listed below do not contain contaminants above the current numerical remediation standard applicable at the time of the comparison and no further remediation is required.

Please list the areas of concern for which the previous statement applies.

Area of Concern	Location Reference Keyed to the Site Map
Former 1,000-gallon Diesel Fuel UST	AOC-2A

Include a separate table comparing the levels of contaminants remaining in each area of concern, the numerical remediation standard approved in the remedial action workplan or at the time of no-further-action approval and the current numerical remediation standards applicable at the time of the comparison. The table shall contain all sampling results, including sample location (depth), sample media, field and laboratory identification numbers, and method detection limits, as necessary, and analytical results for all individual contaminants for each area of concern.

Please Refer to Appendix F

(4) \_\_\_\_ The contaminant concentrations remaining in the below listed areas of concern are more than an order of magnitude greater than the numerical remediation standard applicable at the time of the comparison. However, no further remediation is required by the person conducting this preliminary assessment, because, in accordance with N.J.S.A. 58:10B13(e), that person is not liable for the contamination pursuant to N.J.S.A. 58:10-23.11g

Please list the areas of concern for which the previous statement applies.

Area of Concern	Location Reference Keyed to the Site Map

Include a separate table comparing the levels of contaminants remaining in each area of concern, the numerical remediation standard approved in the remedial action workplan or at the time of no-further-action approval and the current numerical remediation standards applicable at the time of the comparison. The table shall contain all sampling results, including sample location (depth), sample media, field and laboratory identification numbers, and method detection limits, as necessary, and analytical results for all individual contaminants for each area of concern.

# 11 Historical Data on environmental quality at the Industrial Establishment

A. Have any previous sampling results documenting environmental quality of the Industrial Establishment not received a no-further-action approval from the Department or been denied approval by the Department? (N.J.A.C. 7:26E-3.1(c)1.viii)

\_\_\_\_ Yes (See Attachment # \_\_\_\_ ) ☒ No (Go to 12)

B. Have there been any known changes in site conditions or new information developed since completion of previous sampling or remediation? If sampling results were obtained, but are not part of this application, please explain below (N.J.A.C. 7:26E-3.1(c)xi):



- 12 List all federal, state and local environmental permits at this facility, including permits for all previous and current owners or operators, applied for, received, or both (Attach additional sheets if necessary).

Check here if no permits are involved \_\_\_\_\_ and got to question 13.

A. New Jersey Air Pollution Control

Permit Number	Certificate Number	Expiration Date	Type of Permitted Unit
GP010001	N/A	6/1/09	Emergency Generator
PCP010001/ PCP010002	N/A	6/1/09	Hot Water Heaters
PCP010003/ PCP010004	N/A	6/1/09	Boilers
PCP050001	N/A	6/1/09	Pilot Plant
35225	081307	7/16/00	Unknown
	061278	8/5/93	Unknown
	061279	5/13/92	Unknown
	077962	4/30/92	Unknown
	079555	8/13/90	Unknown
	082814	8/13/90	Unknown

B. Underground Storage Tank Registration Number 0005122

Size of Tank (Gallons)	Tank Contents
1,000	Diesel Fuel
1,000	Unknown Hazardous Substance

C. New Jersey Pollutant Discharge Elimination System (NJPDDES) Permit

Permit Number	Discharge Type	Discharge Location Keyed to Site map	Expiration Date
NJD0067920	DSW	Randolph Brook	Unknown

D. Resource Conservation and Recovery Act (RCRA) permit # N/A

E. EPA Identification Number NJR000032011 (Cardinal Health) & formerly NJD044655140 (SGS Thomson Microelectronics)

F. In accordance with N.J.A.C. 7:26E-3.1(c) xii, list all other federal, state, local government environmental permits for all previous and current owners or operators applied for and/or received for the site including :

- (1) Name and address of the permitting agency
- (2) The reason for the permit
- (3) The permit identification number
- (4) The application date
- (5) The date of approval, denial or status of the application
- (6) The name and current address of the permittees
- (7) The reason for the denial, revocation or suspension if applicable
- (8) The permit expiration date

\_\_\_\_\_ Check here if no other environmental permits were applied for or received for this site.

Provide the apper # for the required listing if other environmental permits exist for this site \_\_\_\_.

13. In accordance with N.J.A.C. 7:26E-3.1(c)xiii, provide a summary of enforcement actions (including but not limited to, Notice of Violations, Court Orders, official notices or directives) for violations of environmental laws or regulations (attach additional sheets if necessary):

A. Check here if no enforcement actions are involved \_\_\_\_\_ (Go to 14 otherwise complete 13B)

B. (1) Name and address of agency that initiated the enforcement action

New Jersey Department of Environmental Protection

Division of Water Resources, CN 029

Trenton, New Jersey 08625

(2) Date of the enforcement action 8/19/87

(3) Section of statute, rule or permit allegedly violated NJSA 58 10A-1 et seq

(4) Type of enforcement Written Notice of Violation

(5) Description of the violation Discharging non-contact cooling water without NJPDES permit

(6) How was the violation resolved? NJDPDES application filed on October 6, 1987

C. (1) Name and address of agency that initiated the enforcement action

New Jersey Department of Environmental Protection

Air Compliance & Enforcement

Cedar Knolls, New Jersey 07927

(2) Date of the enforcement action 5/31/06

(3) Section of statute, rule or permit allegedly violated NJAC 7:27-8.3(e)

(4) Type of enforcement Written Notice of Violation

(5) Description of the violation Cardinal failed to fulfill all conditions and provisions of

Permit/Certificate No. PCP050001 by failing to record the scrubbing medium flow rate by strip chart, round chart, or data acquisition system/electronic data storage continuously. In addition, Cardinal failed to record the continuous VOC concentration in effluent prior to discharge.

(6) How was the violation resolved? Cardinal complied with data recording requirements within 30-days of NOV.

D. (1) Name and address agency that initiated the enforcement action

New Jersey Department of Environmental Protection

Air Compliance & Enforcement

Cedar Knolls, New Jersey 07927

(2) Date of the enforcement action 5/31/06

(3) Section of statute, rule or permit allegedly violated NJAC 7:27-8.13(d)4 & NJAC 7:27-8.3(e)

(4) Type of enforcement Written Notice of Violation

(5) Description of the violation Cardinal failed to comply with all conditions and provisions of Permit/Certificate No. PCP050001 by failing to submit the 2005 Annual Batch Reports by April 1, 2006 for batch Process 2: Soft Gel Solvent Based, Batch Process 3: Zydys NonSolvent Based Small, Batch Process 4: Zydys Solvent Based, Batch Process 5: Oral Solids - NonSolvent Based, Batch Process 6: Oral Solids - Solvent Based, Batch Process 7: Soft Gel NonSolvent Based Large, Batch Process 8: Soft Gel Solvent Based Large.

(6) How was the violation resolved? Cardinal submitted required Batch Reports within 30-days of NOV.

E. (1) Name and address of agency that initiated the enforcement action

New Jersey Department of Environmental Protection

Air Compliance & Enforcement

Cedar Knolls, New Jersey 07927

(2) Date of the enforcement action 2/10/06

(3) Section of statute, rule or permit allegedly violated NJAC 7:26G-6.1(a), 40 CFR 262.34(a)2, 40 CFR 262.34(a)3, & 40 CFR 265.35

(4) Type of enforcement Written Notice of Violation

(5) Description of the violation Cardinal failed to mark one 55-gallon drum of D001 hazardous waste with the date upon which each period of accumulation begins and with the words "Hazardous Waste". In addition, Cardinal was found to have two fiber containers of hazardous waste arranged in a manner in which their hazardous waste labels were not visible upon inspection. Finally, Cardinal failed to maintain sufficient aisle space for the unobstructed movement of personnel or equipment in an emergency.

(6) How was the violation resolved? Cardinal properly labeled the drum and cleared the aisle.

F. (1) Name and address agency that initiated the enforcement action:

New Jersey Department of Environmental Protection

Air Compliance & Enforcement

Cedar Knolls, New Jersey 07927

(2) Date of the enforcement action 6/20/03

(3) Section of statute, rule or permit allegedly violated NJAC 7:27-8.13(a)

(4) Type of enforcement Written Notice of Violation

(5) Description of the violation Cardinal failed to comply with all conditions and provisions of Permit/Certificate No. PCP050001 by operating CD5 – Metal Frame HEPA with a pressure drop reading of 0.75 inches and operating CD7 – Weigh Booth with a pressure drop reading of 0.20 inches.

(6) How was the violation resolved? Cardinal corrected the pressure drops on each piece of equipment.

14. In accordance with N.J.A.C. 7:26E-3.1(c) xiv, please provide a narrative description of all areas where non-indigenous fill materials were used to replace soil or raise the topographic elevation of the site, including the dates of emplacement:

15. A. In accordance with N.J.A.C. 7:26E-3.2(a) 3.i, submit a scaled site plan, detailing the subject lot and block, property and or leasehold boundaries, location of current and former buildings, fill areas, paved and unpaved areas, vegetated areas, and all areas of concern identified above and all active or inactive wells.

**Please refer to Figure 2**

B. Scaled historical site maps and facility as built drawings (if available).

G. A copy of the United States Geologic Survey (USGS) 7.5 minute topographical quadrangle that includes the site and an area of at least one mile radius around the site. The facility location shall be clearly noted. If a portion of the USGS quadrangle is used, the scale, north arrow, contour interval, longitude and latitude with the name and date of the USGS quadrangle shall be noted on the map.

**Please refer to Figure 1**

16. In accordance with N.J.A.C. 7:26E-3.2, please provide the date that the site visit was completed to verify the findings of the preliminary assessment. February 9, 2007

17. List any other information you are submitting or which has been formerly requested by the Department:

Description	Appendix #
N/A	

**CERTIFICATION:**

The following certification shall be signed by the highest-ranking individual at the site with overall responsibility for that site or activity. Where there is no individual at the site with overall responsibility for that site or activity, this certification shall be signed by the individual having responsibility for the overall operation of the site or activity.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information, and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Typed/Printed Name CHARLES ECHOLS Title VP EHRS, CARDINAL HEALTH

Signature Charles A Echols Date 8/9/07

Sworn to and Subscribed Before Me on this 9<sup>th</sup> day of August 2007



Date of 8-9 18 2007

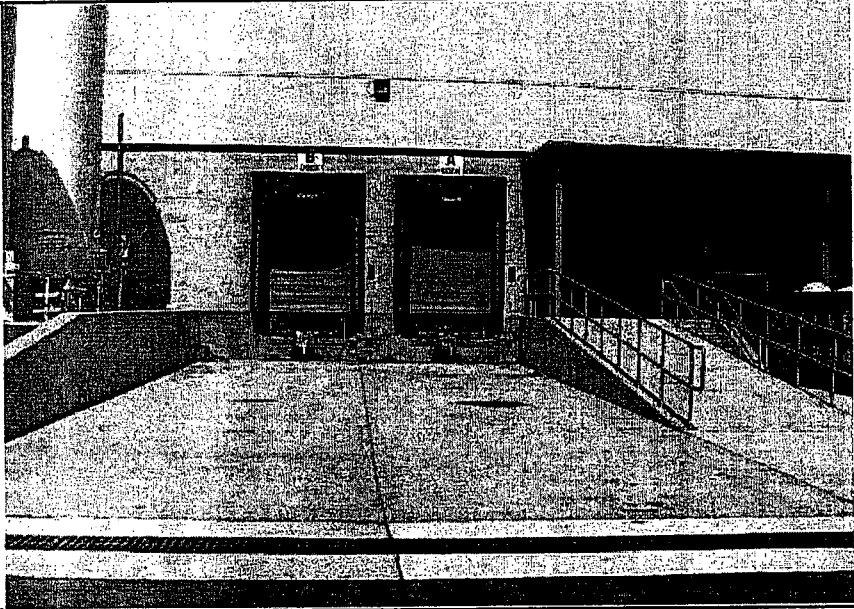
Notary Kristeen D Miller



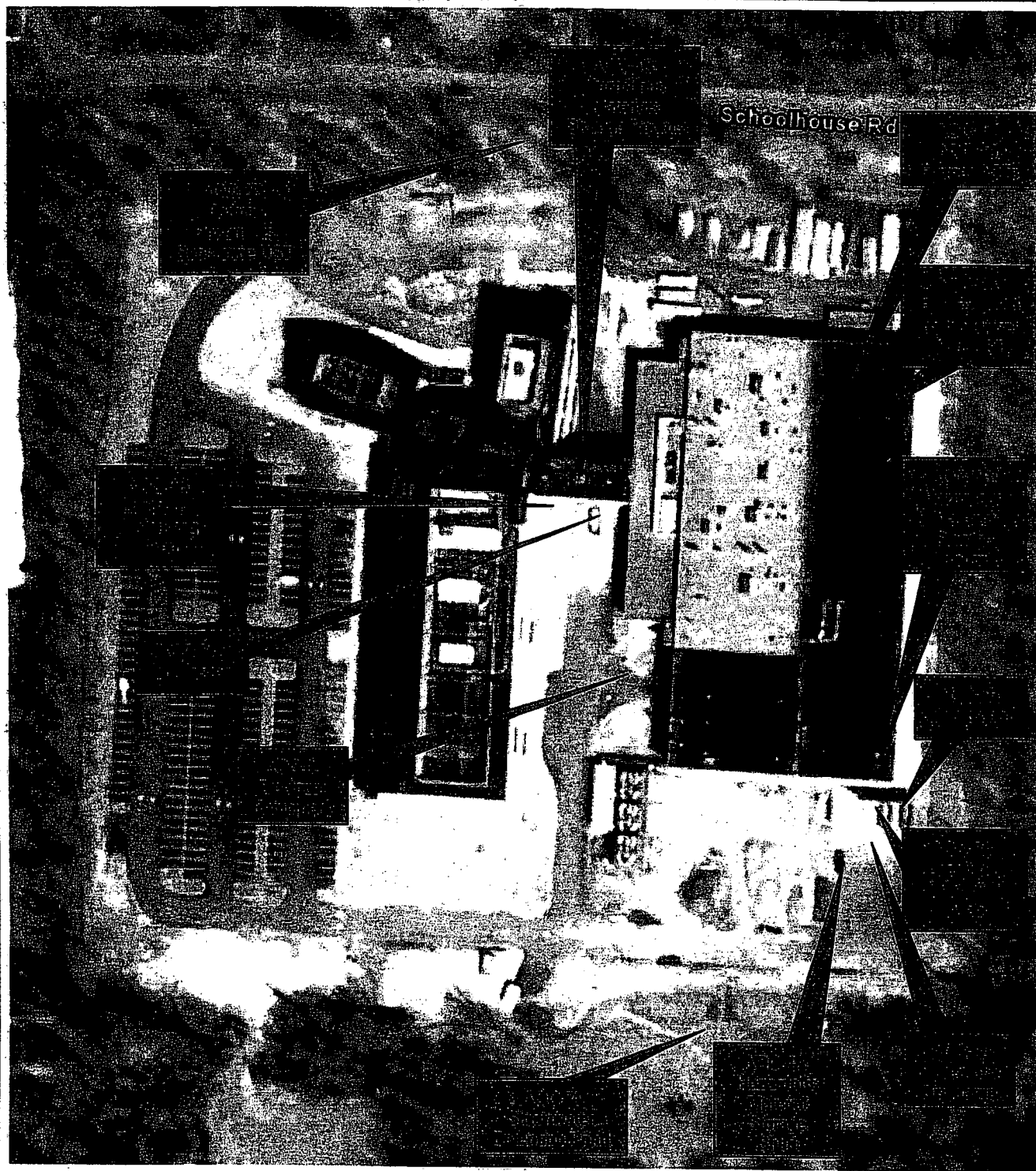
KRISTEEN D. MILLER  
Notary Public, State of Ohio  
My Commission Expires 02-17-09



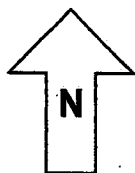
<b>URS</b>		<b>PHOTOGRAPHIC LOG</b>	
<b>Client Name:</b> Pentair Corporation		<b>Site Location:</b> Former Cardinal Health Facility 14 Schoolhouse Road, Franklin Twp., New Jersey	<b>Project No.</b> 11130076
<b>Photo No.</b> 1	<b>Date:</b> 4/17/08		
<b>Direction Photo Taken:</b>  Looking southeast			
<b>Description:</b>  View of storm water retention basin on south side of site			
<b>Photo No.</b> 2	<b>Date:</b> 4/17/08		
<b>Direction Photo Taken:</b>  Looking southeast			
<b>Description:</b>  View of storm water retention basin on south side of site			

<b>URS</b>		<b>PHOTOGRAPHIC LOG</b>	
<b>Client Name:</b> Pentair Corporation		<b>Site Location:</b> Former Cardinal Health Facility 14 Schoolhouse Road, Franklin Twp., New Jersey	<b>Project No.</b> 11130076
<b>Photo No.</b> 3	<b>Date:</b> 4/17/08		
<b>Direction Photo Taken:</b> Looking North			
<b>Description:</b> View of loading docks A and B on south side of site building, trench drain in foreground is approximate location of historical methanol release.			





**URS**



**FIGURE 2 – SITE LAYOUT PLAN**

**SITE NAME:** Cardinal Health 406, LLC  
**ADDRESS:** 14 Schoolhouse Road  
**BOROUGH, COUNTY, STATE:** Franklin Twp, Somerset Co., NJ  
**URS PROJECT NO.:** 11130076

Google Earth Imaging, 2007

\*AOC-6 (Chemical Storage Cabinets), AOC-11 (Compressor Vent Discharges, & AOC-12 (Air Vents/Ducts) located at various locations throughout the facility



## PHOTOGRAPHIC RECORD

**Client Name:**

Cardinal Health

**Site Location:**

14 Schoolhouse Road, Franklin Township, NJ

**Project No.**

11130076

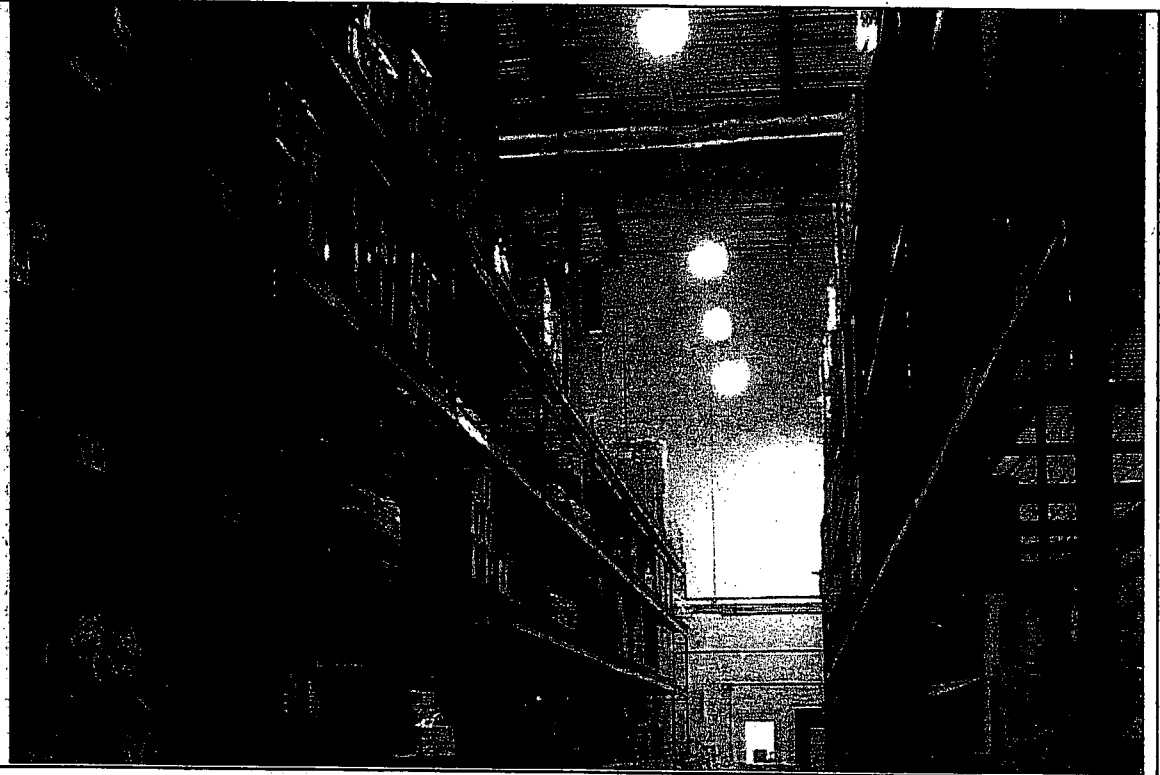
**Photo No. 1**

**View Direction of Photo:**

South

**Description:**

Incoming material storage racks



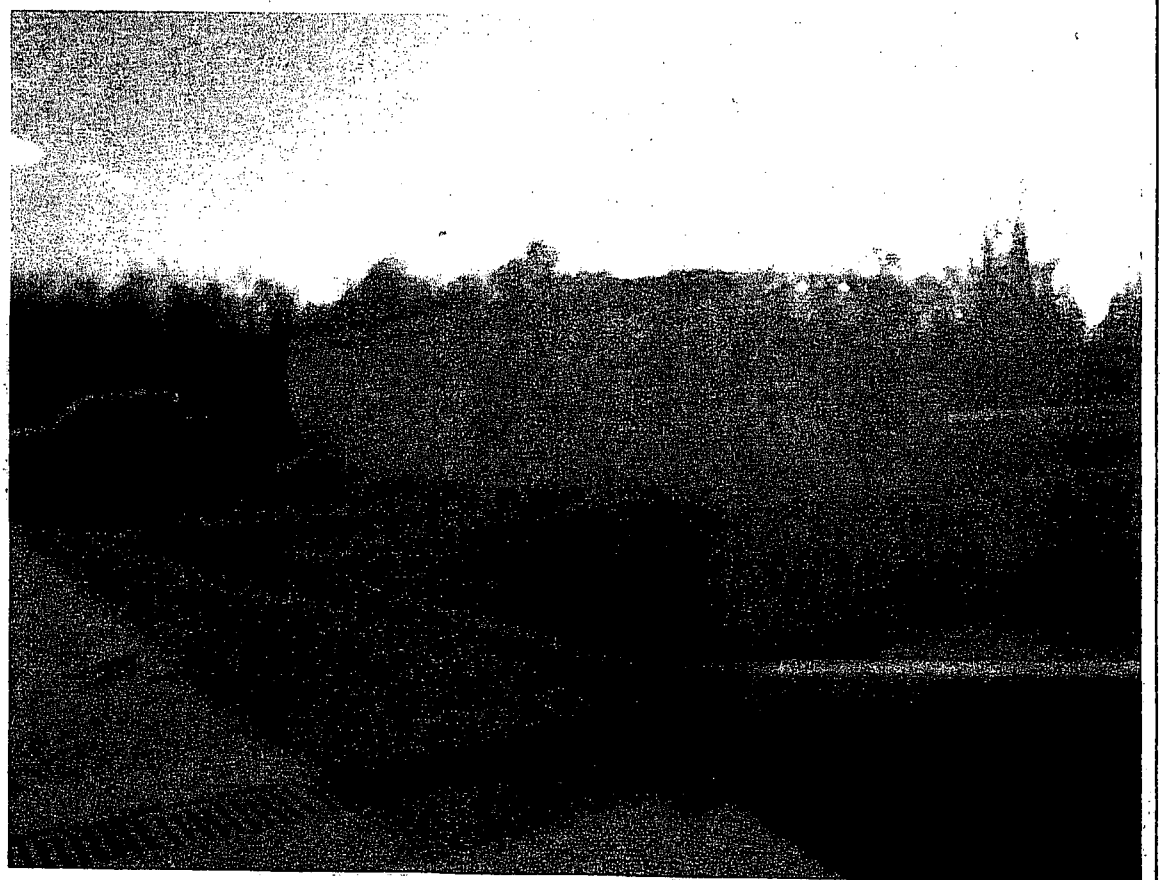
**Photo No. 2**

**View Direction of Photo:**

South

**Description:**

Chemical Storage Shed (AOC-4A)



**Client Name:**

Cardinal Health

**Site Location:**

14 Schoolhouse Road, Franklin Township, NJ

**Project No.**

11130076

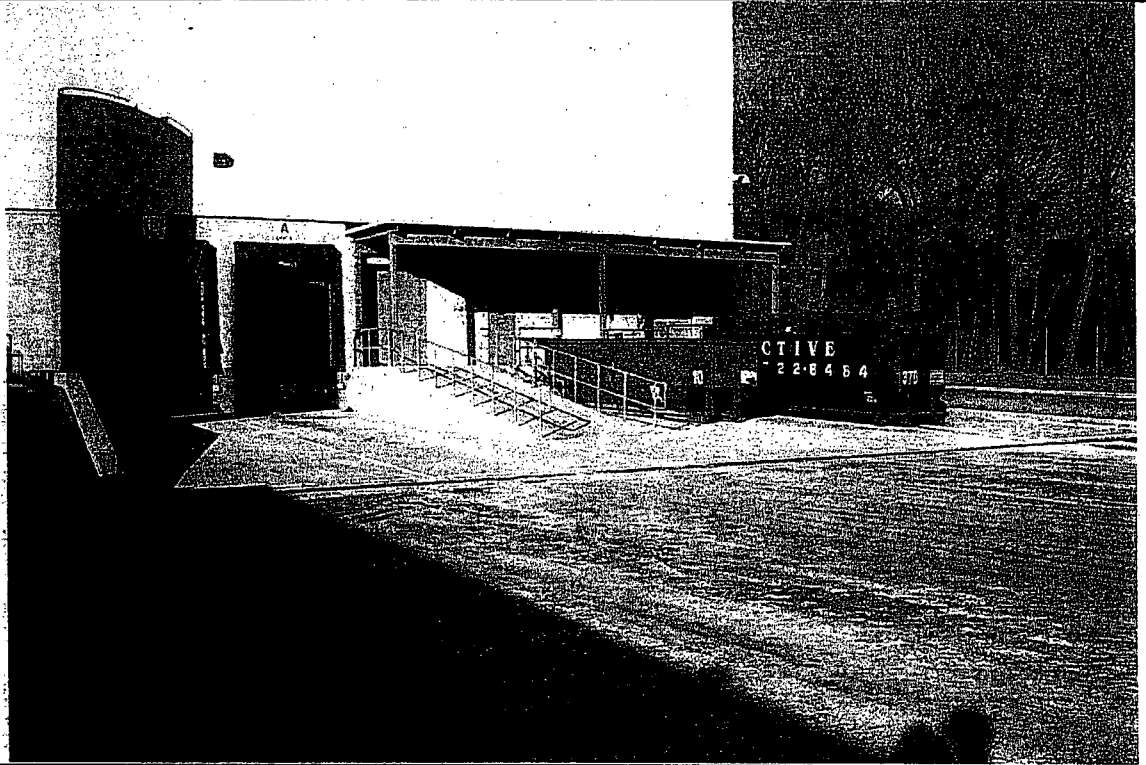
**Photo No. 3**

**View Direction of Photo:**

North

**Description:**

Southeastern corner of building (AOCs 3A, 5B, & 8)



**Photo No. 4**

**View Direction of Photo:**

South

**Description:**

Stormwater detention pond (AOC-7)



**Client Name:**

Cardinal Health

**Site Location:**

14 Schoolhouse Road, Franklin Township, NJ

**Project No.**

11130076

**Photo No. 5**

**View Direction of Photo:**

South

**Description:**

Hazardous material storage room (AOC-4B)



**Photo No. 6**

**View Direction of Photo:**

North

**Description:**

Hazardous material storage room (AOC-4C)



**Client Name:**

Cardinal Health

**Site Location:**

14 Schoolhouse Road, Franklin Township, NJ

**Project No.**

11130076

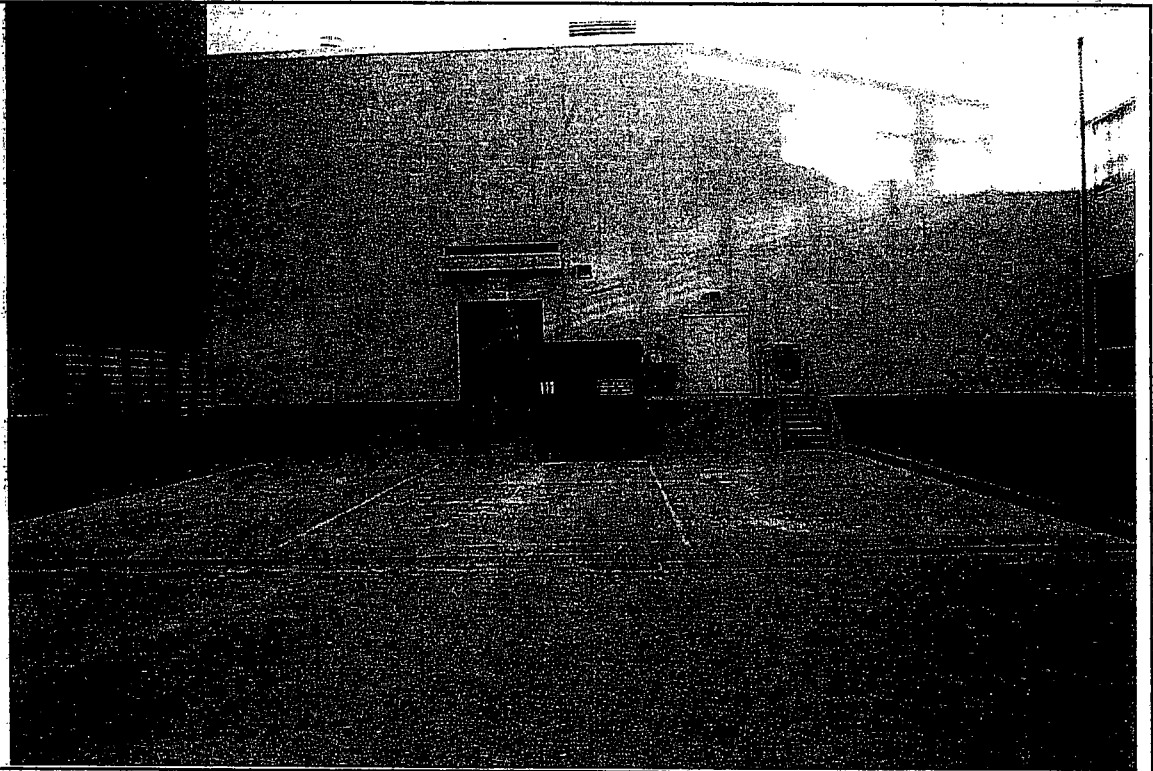
**Photo No. 7**

**View Direction of Photo:**

North

**Description:**

Loading Dock C  
(AOCs 3B & 5A)



**Photo No. 8**

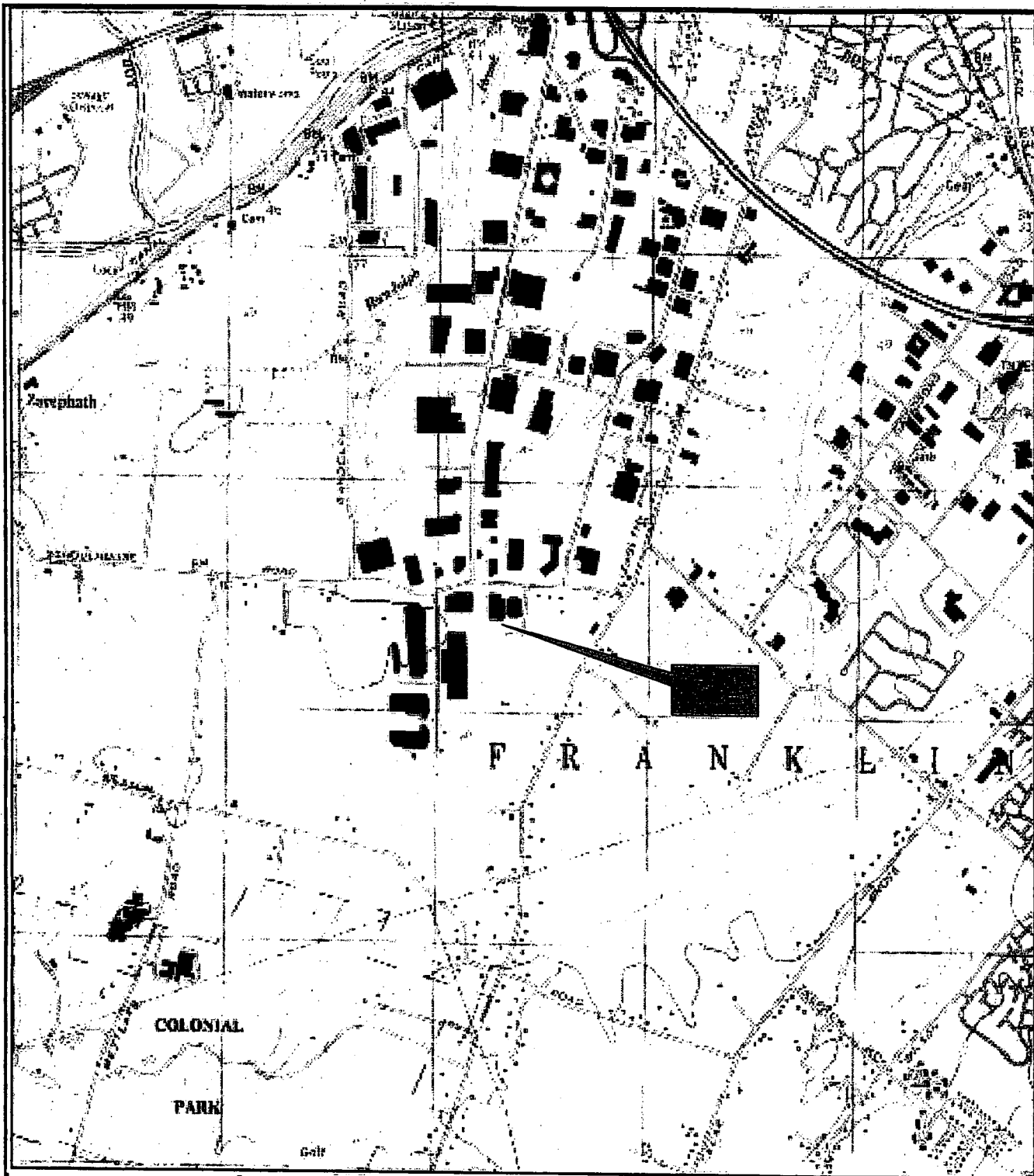
**View Direction of Photo:**

East

**Description:**

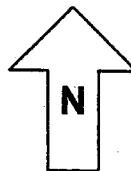
Electrical equipment  
(AOC-9)





**FIGURE 1 – SITE LOCATION MAP**

**URS**



**SITE NAME:** Cardinal Health 406, LLC  
**ADDRESS:** 14 Schoolhouse Road  
**BOROUGH, STATE, ZIP:** Franklin Township, Somerset Co., NJ  
**URS PROJECT NO.:** 11130076  
**SCALE:** 1 : 24,000

U.S.G.S. Bound Brook, N.J.

Quadrangle 1995




INQUIRY #: 1857140.5

YEAR: 1954

1 = 750'





INQUIRY #: 1857140.5

YEAR: 1963

1 = 750'







INQUIRY #: 1857140.5  
YEAR: 1978  
| = 833'





INQUIRY #: 1857140.5

YEAR: 1984

1 = 1000'





INQUIRY #: 1857140.5

YEAR: 1995

| = 833'



P340



**URS**



Google Earth Imaging, 2007

### 2007 Aerial Photograph

**SITE NAME:** Cardinal Health, Inc.  
**ADDRESS:** 14 Schoolhouse Road  
**BOROUGH, STATE, ZIP:** Franklin Township, Somerset Co., NJ  
**URS PROJECT NO.:** 11130076

## 1. HISTORICAL CHAIN OF TITLE

### **I. Chain 1 - Conveys Block 514, Chain 20.01**

#### **1. DEED**

RECORDED: 05/09/1953  
GRANTOR: Edwin J. Quinby and Margaret Bell Quinby, and Jack Robillard Quinby  
GRANTEE: Bryant W. Griffin  
INSTRUMENT: Book 801, Page 206

#### **2. DEED**

RECORDED: 05/27/1954  
GRANTOR: Bryant W. Griffin and Dorothy T. Griffin  
GRANTEE: Logan Steele  
INSTRUMENT: Book 818, Page 485

#### **3. DEED**

RECORDED: 10/03/1966  
GRANTOR: Logan B. Steele and Lee. E. Steele  
GRANTEE: Ralph Woodworth, Sr. and Margaret Woodworth  
INSTRUMENT: Book 1137, Page 223

#### **4. DEED**

RECORDED: 11/19/1968  
GRANTOR: Margaret Woodworth, a widow  
GRANTEE: Ezra H. Zeloof  
INSTRUMENT: Book 1192, Page 260  
COMMENTS: Ralph Woodworth Sr. died 01-09-1967

#### **5. DEED**

RECORDED: 11/17/1974  
GRANTOR: Ezra H. Zeloof and Edith Zeloof  
GRANTEE: Ezra H. Zeloof and Edith Zeloof  
INSTRUMENT: Book 1306, Page 759

#### **6. DEED**

RECORDED: 06/29/1986  
GRANTOR: Ezra H. Zeloof and Edith Zeloof  
GRANTEE: Microwave Semiconductor Corporation  
INSTRUMENT: Book 1569, Page 196



7. DEED

RECORDED: 03/26/1991  
GRANTOR: Ezra H. Zeloof and Edith Zeloof  
GRANTEE: Siemens MC, Inc., formerly Microwave Semiconductor Corporation  
INSTRUMENT: Book 1810, Page 53

8. DEED

RECORDED: 02/24/1995  
GRANTOR: Siemens MC, Inc.  
GRANTEE: Invamed, Inc.  
INSTRUMENT: Book 1998, Page 692

9. DEED

RECORDED: 11/13/1998  
GRANTOR: Invamed, Inc.  
GRANTEE: Bochasanwasi Swaminaryan Sastha, Inc  
INSTRUMENT: Book 2204, Page 314

10. DEED

RECORDED: 04/17/2000  
GRANTOR: Bochasanwasi Swaminaryan Sastha, Inc  
GRANTEE: Suntrust Banks, Inc.  
INSTRUMENT: Book 2291, Page 291

11. DEED

RECORDED: 01/04/2001  
GRANTOR: Suntrust Banks, Inc.  
GRANTEE: Suntrust Banks, Inc  
INSTRUMENT: Book 2334, Page 17  
COMMENTS: Consolidates lots 20.01, 20.03 and 24.01 into Block 514, Lot 20.04

II. Chain 2 - Conveys Block 514, Lot 20.03

12. DEED

RECORDED: 08/27/1956  
GRANTOR: Daniel Graziano and Elizabeth Graziano  
GRANTEE: Jacob Bodnarchuk and Lorraine Bodnarchuk  
INSTRUMENT: Book 877, Page 410

13. DEED

RECORDED: 08/27/1956  
GRANTOR: Daniel Graziano and Elizabeth Graziano  
GRANTEE: Peter Fiure and Elizabeth Fiure  
INSTRUMENT: Book 877, Page 412

14. DEED

RECORDED: 10/14/1986  
GRANTOR: Daniel J. Graziano and Elizabeth Graziano, Peter Fiure and Elizabeth Fiure, Jacob Bodnarchuk and Lorraine Bodnarchuk  
GRANTEE: Siemens Medical Systems, Inc.  
INSTRUMENT: Book 1599, Page 475

15. DEED

RECORDED: 04/27/1987  
GRANTOR: Siemens Medical Systems, Inc.  
GRANTEE: Microwave Semiconductor Corporation  
INSTRUMENT: Book 1631, Page 64

16. DEED

RECORDED: 05/18/1998  
GRANTOR: Siemens MC, Inc., formerly Microwave Semiconductor Corporation  
GRANTEE: Somerset Commerce Center, LLC  
INSTRUMENT: Book 2170, Page 873

17. DEED

RECORDED: 09/02/1999  
GRANTOR: Somerset Commerce Center, LLC  
GRANTEE: Somerset Commerce Center, LLC  
INSTRUMENT: Book 2254, Page 571

18. DEED

RECORDED: 04/17/2000  
GRANTOR: Somerset Commerce Center, LLC  
GRANTEE: Suntrust Banks, Inc.  
INSTRUMENT: Book 2291, Page 286

19. DEED

RECORDED: 01/04/2001  
GRANTOR: Suntrust Banks, Inc.  
GRANTEE: Suntrust Banks, Inc.  
INSTRUMENT: Book 2334, Page 17  
COMMENTS: Consolidates lots 20.01, 20.03 and 24.01 into Block 514, Lot 20.04

**III. Chain 3 - Conveys Block 514 Lot 24.01**

**20. DEED**

RECORDED: 08/27/1956  
GRANTOR: Daniel Graziano and Elizabeth Graziano  
GRANTEE: Jacob Bodnarchuk and Lorraine Bodnarchuk  
INSTRUMENT: Book 877, Page 410

**21. DEED**

RECORDED: 08/27/1956  
GRANTOR: Daniel Graziano and Elizabeth Graziano  
GRANTEE: Peter Fiure and Elizabeth Fiure  
INSTRUMENT: Book 877, Page 412

**22. DEED**

RECORDED: 10/14/1986  
GRANTOR: Daniel J. Graziano and Elizabeth Graziano, Peter Fiure and Elizabeth Fiure, Jacob Bodnarchuk and Lorraine Bodnarchuk  
GRANTEE: Siemens Medical Systems, Inc.  
INSTRUMENT: Book 1599, Page 475

**23. DEED**

RECORDED: 04/27/1987  
GRANTOR: Siemens Medical Systems, Inc.  
GRANTEE: Microwave Semiconductor Corporation  
INSTRUMENT: Book 1631, Page 64

**24. DEED**

RECORDED: 05/18/1998  
GRANTOR: Siemens MC, Inc., formerly Microwave Semiconductor Corporation  
GRANTEE: Somerset Commerce Center, LLC  
INSTRUMENT: Book 2170, Page 873

**25. DEED**

RECORDED: 09/02/1999  
GRANTOR: Somerset Commerce Center, LLC  
GRANTEE: Somerset Commerce Center, LLC  
INSTRUMENT: Book 2254, Page 586



26. DEED

RECORDED: 04/17/2000  
GRANTOR: Somerset Commerce Center, LLC  
GRANTEE: Suntrust Banks, Inc.  
INSTRUMENT: Book 2291, Page 286

27. DEED

RECORDED: 01/04/2001  
GRANTOR: Suntrust Banks, Inc.  
GRANTEE: Suntrust Banks, Inc.  
INSTRUMENT: Book 2334, Page 17  
COMMENTS: Consolidates lots 20.01, 20.03 and 24.01 into Block 514,  
Lot 20.04

## **APPENDIX B – SITE HISTORY**

Based on a review of available records, the subject property was farmland until Microwave Semiconductor Corporation (MSC) began operating on-site as a division of Siemens MC, Inc. (Siemens) in 1969 as an independent merchant supplier of microwave power semiconductors and modules. MSC designed, assembled, and tested silicon microwave power semiconductors, system components, and subsystems for advanced telecommunication, radar, and electronic warfare applications. MSC's facility consisted of a "south building" and a process building on the southern side of Schoolhouse Road (Block 517, Lot 20.01) and a "north building" and a pole barn on the northern side of Schoolhouse Road (Block 514, Lot 20.01).

A potential sale of property and business triggered ECRA Case No. 88B51. A Negative Declaration Affidavit submitted by MSC was approved by NJDEP on March 27, 1989.

SGS-Thomson Microelectronics, Inc. (SGS) purchased Microwave Semiconductor Corporation from Siemens on October 10, 1989. The transaction transferred the real estate on the northern side of Schoolhouse Road and the business on both sides of the road to SGS. However, Siemens maintained ownership of the real estate on the southern side of Schoolhouse Road, thereby rendering it a separate entity from the northern parcel (now owned/operated by Cardinal Health) and subsequently leased it to SGS. MSC's operations under SGS's ownership remained as described above. The business and partial property transfer triggered ECRA Case No. E89560. Several areas of concern on the northern portion (Block 517, Lot 20.01) of Siemens' facility were subject to further investigation including a chemical waste storage area where impacted soil was removed and a groundwater Classification Exception Area was established for 1,1-dichloroethene and 1,1,1-trichloroethane. A Letter of No Further Action was issued by NDJEP on September 12, 1996. It should be noted that the northern parcel that was subject to additional investigation is not owned or operated by Cardinal Health and is, therefore, not included in this Preliminary Assessment. The northern parcel is currently known as 25 Schoolhouse Road (Block 517.02, Lot 20.01) and is owned by Triple Net Inv. CLP c/o OFS Fitel LL.

SGS terminated their lease with Siemens on December 13, 1990, which triggered ECRA Case No. 90617. A Negative Declaration Affidavit submitted by SGS was approved by NJDEP on March 20, 1991.

## **APPENDIX C – SUMMARY OF RECENT OPERATIONS**

Cardinal Health began operating at the site in 2002 with a full range of pharmaceutical services including drug development, formulation of innovative delivery technologies, and clinical manufacturing. As a full-service, drug-development facility, Cardinal's facility supports both large and small pharmaceutical and biotechnology companies throughout the drug development process. The 265,000 square foot facility includes an 80,000 square foot pilot plant for producing clinical supplies such as softgels, oral solid and liquid dosages, and Zydis products.

## **APPENDIX E – PROCESS WASTE STREAMS & DISPOSAL POINTS**

### **• Microwave Semiconductor Corporation**

Microwave Semiconductor Corporation generated two basic categories of liquid effluent: acid waste and solvent waste. The acid waste stream consisted of solutions containing hydrofluoric acid, sulfuric acid, phosphoric acid, nitric acid, hydrochloric acid, acetic acid, ammonium fluoride, ammonium hydroxide, and/or hydrogen peroxide. The acid wastes were treated by a pH adjustment system prior to discharge to the sanitary sewer. The pH adjustment took place in a 1,000-gallon fiberglass wastewater equalization aboveground storage tank (AST) on the eastern side of the process building. Solvent wastes were collected in 55-gallon drums for off-site disposal. Four separate exhaust systems were also operated to handle process exhaust generated by MSC's manufacturing operations.

Hazardous historic process waste streams collected and disposed of off-site included ignitable wastes (D001), specific spent halogenated solvents used in degreasing (F001), specific spent non-halogenated solvents (F005), arsenic dust (D004), etching acid as a corrosive waste (D002), and potassium cyanide as a spent stripping and cleaning bath solution from electroplating operations (F009).

### **• Cardinal Health**

Non-hazardous historic and current process waste streams have been limited to typical office and breakroom wastes, and empty 55-gallon steel drums. General solid waste is contained in a 30-cubic yard compactor near Loading Dock C and a 30-cubic yard dumpster and a 40-cubic yard compactor near Loading Docks A & B. The compactors and the dumpster are stored on concrete and are serviced by Active Disposal, Inc. on an as needed basis. Empty 55-gallon drums are returned to the supplier who recycles the used drums on an as needed basis. No visible evidence of spills or staining was observed on the pavement around the bases of the containers at the time of URS' site reconnaissance. Additionally, no unusual odors were emanating from the containers at the time of the site reconnaissance.

Primary hazardous historic and current process waste streams collected and disposed of off-site have included ignitable wastes (D001), specific spent non-halogenated solvents (F003), and corrosive wastes (D002). Secondary hazardous historic and current waste streams have included sodium cyanide (P106), acetone (U002), acetaldehyde (U001). These wastes are stored in satellite collection containers throughout the facility and in storage rooms on the south side of the building's interior and exterior.

Primary universal wastes generated by Cardinal Health include HID Lamps, NICAD batteries, lead acid batteries, and fluorescent lamps.

Dust from Pilot Plant operations are collected via dust collectors and HEPA filters.

Veolia Environmental Services of Flanders, New Jersey picks up Cardinal Health's non-hazardous, hazardous, and universal wastes for off-site disposal. No visible evidence of spills or staining was observed on the concrete floor in the satellite collection areas in the facility or the main storage room at the time of the site reconnaissance.

Limited amounts of medical waste are picked up by Stericycle, Inc. for off-site disposal.

## **APPENDIX F – AREAS OF CONCERN**

### **AOC-1: Aboveground Storage Tanks and Associated Piping**

SGS Thomson Microelectronics, Inc. (SGS) operated one 1,000-gallon fiberglass aboveground storage tank (AST) for wastewater equalization, one 2,000-gallon rubber-lined steel AST for hydrochloric acid (HCl) storage, and one 4,500-gallon polyethylene AST for sodium hydroxide (NaOH) storage. These ASTs were reportedly installed in 1986 and were removed when SGS ceased operations on-site in 1989. The HCl and NaOH ASTs were enclosed in concrete secondary containment structures. No spills or releases were reported for this area in available records. Furthermore, the area where these former ASTs were previously maintained is currently overlain by Cardinal Health's pilot plant. The AST storage area was also addressed under ECRA Case Nos. 88B51 and 90617 which garnered approved Negative Declaration Affidavits and ECRA Case No. 89560 which received a Letter of No Further Action. Therefore, no sampling is recommended or warranted for these areas.

### **AOC-2A & AOC-2B: Underground Storage Tanks and Associated Piping**

- **AOC-2A – Medium Diesel Fuel UST**

One 1,000-gallon medium diesel fuel underground storage tank (UST) was installed on the eastern side of the "process building" in 1986 to power an emergency generator. The UST was reportedly double-walled steel with a cathodic protection system. The UST was removed in July 1994 (TMS No. C940027) and a letter of No Further Action was issued for the closure on November 2, 1994.

Pursuant to NJDEP requirements during ECRA Case No. 88B51's site investigation, three soil borings were advanced around the tank on December 16, 1998. One grab soil sample was collected from each boring (A01, A02, & A03) at 0.5-feet to 1-foot below the UST's invert. The soil samples were submitted for laboratory analysis of total petroleum hydrocarbons (TPH) and base neutrals with a forward library search for fifteen additional compounds (BN+15). The TPH results ranged from 8 milligrams per kilogram (mg/kg) in A02 to 40 mg/kg in A03. The total BN+15 results were below the laboratory's method detection limit.

Pursuant to NJDEP requirements during ECRA Case No. 90617's site investigation, three soil borings were advanced around the tank on October 23, 1990. One grab soil sample was collected from each boring (B01, B02, & B03) at 0.5-feet to 1-foot below the UST's invert. The soil samples were submitted for laboratory analysis of TPH and BN+15. The TPH results ranged from 62 milligrams per kilogram (mg/kg) in B02 to 110 mg/kg in B03. The total BN+15 results ranged from 0.087 mg/kg in B03 to 0.450 mg/kg in B01.

During the closure of the UST in 1994, four post-excavation soil samples were collected around the perimeter of concrete slab to which the UST was anchored. The TPH analysis of the collected samples were below the laboratory's method detection limit, which ranged from 54 mg/kg to 57 mg/kg.

The following data table summarizes the laboratory results described above:

DATE	MEDIA	SAMPLE ID NO.	SAMPLE DEPTH (FEET)	PARAMETER	SOIL CLEANUP CRITERIA	RESULT (MG/KG)
12/16/88	Soil	A01	7-7.5	TPH	10,000	28
				PAH	N/A	ND
		A02	7-7.5	TPH	10,000	8
				PAH	N/A	ND
		A03	7-7.5	TPH	10,000	40
				PAH	N/A	ND
10/23/90	Soil	B01	7-7.5	TPH	10,000	76
				BN+15	N/A	0.45
		B02	7-7.5	TPH	10,000	62
				BN+15	N/A	0.164
		B03	7-7.5	TPH	10,000	110
				BN+15	N/A	0.087
7/8/94	Soil	PX-1	7.6	TPH	10,000	<56
		PX-2	7.6	TPH	10,000	<54
		PX-3	7.6	TPH	10,000	<57
		PX-4	7.6	TPH	10,000	<54

No sampling is recommended or warranted for this area.

- AOC-2B – Unspecified Hazardous Substance UST

One 1,000-gallon single wall steel UST was reportedly installed along Schoolhouse Road in 1976. This UST reportedly contained an unspecified hazardous substance and did not have spill recovery, overfill protection, or spill containment. According to available documents, the UST was removed on August 7, 1987. Information regarding the integrity of the removed UST or the subsurface surrounding the former UST was not available for review. Therefore, further investigation of this area is recommended.

#### AOC-3A & AOC-3B: Loading and Unloading Areas & Loading or Transfer Areas

The subject property has two (2) main loading and unloading areas. Loading Docks A & B are near the southeastern corner of the subject building (AOC-3A) and Loading Dock C is in the central portion of the facility (AOC-3B). Each of the areas is paved with no visible indications of cracks or staining. With the exception of the methanol release described in Appendix H and AOC-8 of this Appendix, no spills or releases were reported for these areas. Therefore, no sampling is recommended or warranted for these areas.

AOC-4A, AOC-4B, & AOC-4C: Storage Pads Including Drum and/or Waste Storage, Hazardous Material Storage or Handling Areas

A climate controlled storage shed (AOC-4A) used to store 55-gallon drums of solvents was observed on the southern side of the Cardinal Health facility exterior. Visible evidence of staining or spills was not observed inside or outside the shed during URS' site reconnaissance. Therefore, no sampling is recommended or warranted for this area.

The non-flammable waste storage area was observed in the southeastern corner of the building (AOC-4B). Visible evidence of staining was not observed on the concrete floor in this area. In addition, the concrete floor appeared to be intact and without other forms of compromised integrity during URS' site reconnaissance. Therefore, no sampling is recommended or warranted for this area.

Three storage rooms containing hazardous, non-hazardous, and universal wastes and unused materials were observed near Loading Dock C (AOC-4C). Visible evidence of staining was not observed on the concrete floors in this area. In addition, the concrete floors appeared to be intact and without other forms of compromised integrity during URS' site reconnaissance. Therefore, no sampling is recommended or warranted for these areas.

Satellite storage areas were observed throughout the facility laboratories. No visible evidence of staining was observed on the intact, concrete and/or tiled flooring beneath the containers. Therefore, no sampling is recommended or warranted for these areas.

AOC-5A & AOC-5B: Dumpsters

General solid waste is contained in a 30-cubic yard compactor (AOC-5A) near Loading Dock C and a 30-cubic yard dumpster and a 40-cubic yard compactor (AOC-5B) near Loading Dock A & B. The compactors and the dumpster are stored on concrete and are serviced by Active Disposal, Inc. on an as needed basis. No visible evidence of staining or unusual odors were associated with the containers during URS' site reconnaissance. Therefore, sampling is not recommended or warranted for these areas.

AOC-6: Chemical Storage Cabinets or Closets

Flammable storage cabinets were observed throughout the facility. No visible evidence of staining was observed on the intact, concrete and/or tiled flooring beneath the cabinets. Therefore sampling is not recommended or warranted for these areas.

✓ AOC-7: Storm Sewer Collection Systems & Stormwater Detention Pond.

Trench drains were observed near Loading Dock C and Loading Docks A & B. These drains discharge to a stormwater detention pond on the southern side of the facility. Visible evidence of staining was not observed in the vicinity of the drain. With the exception of the methanol release described in Appendix H and AOC-8 of this Appendix, no spills or releases were reported for these areas. Therefore, no sampling is recommended or warranted for these areas.



#### AOC-8: Areas of Discharge per N.J.A.C. 7:1E

On August 21, 2006, approximately four-liters of spilled methanol entered a trench drain near the subject property's Loading Docks A & B. Cardinal Health personnel contacted the NJDEP Spill Hotline and case number 06-08-21-1610-29 was issued. Due to the high ambient air temperature and high sunlight exposure, the spilled methanol reportedly evaporated at a rapid rate and did not migrate to the trench drain's discharge point in the facility's stormwater retention pond. Cardinal Health personnel observed no visible evidence of the spilled methanol at the end of the discharge pipe. Based on these observations, no further action was taken in response to the discharge nor did NJDEP request further action. With respect to the protectiveness of past remedies pursuant to N.J.A.C. 7:26E-3.1(c) 1.ix, given that the spilled material did not migrate beyond the concrete trench drain and that the material volatilized rapidly, the remedy appears to have remained protective of public health, safety and the environment. Therefore, no sampling is recommended or warranted for these areas.

#### AOC-9: Electrical Transformers & Capacitors

Pad mounted transformers owned by Public Service Electric & Gas Company were observed near the southwestern corner of the pilot plan of the subject building. No visible evidence of leaking or staining was observed on the intact, concrete pads beneath the transformer. In addition, no prior releases have been reported. Therefore, sampling is not recommended or warranted for these areas.

#### AOC-10: Waste Treatment Areas

Microwave Semiconductor Corporation generated an acid waste stream that consisted of solutions containing hydrofluoric acid, sulfuric acid, phosphoric acid, nitric acid, hydrochloric acid, acetic acid, ammonium fluoride, ammonium hydroxide, and/or hydrogen peroxide. The acid wastes were treated by a pH adjustment system prior to discharge to the sanitary sewer. The pH adjustment took place in a 1,000-gallon fiberglass wastewater equalization aboveground storage tank (AST) on the eastern side of the process building. This AST was reportedly removed when SGS ceased operations on-site in 1989. No spills or releases were reported for this area in available records. Furthermore, the area where the former AST was maintained is currently overlain by Cardinal Health's pilot plant. The AST storage area was also addressed under ECRA Case Nos. 88B51 and 90617 which garnered approved Negative Declaration Affidavits and ECRA Case No. 89560 which received a Letter of No Further Action. Therefore, no sampling is recommended or warranted for this area.

#### AOC-11: Compressor Vent Discharges

Air compressors were observed throughout the facility. Vent discharges are collected in small (less than one-gallon) plastic containers whose contents are transferred to 55-gallon drums stored in the Loading Dock C storage rooms on an as needed basis. No visible evidence of leaking or staining was observed on the intact, concrete floor beneath each of the compressors. Therefore, sampling is not recommended or warranted for these areas.

AOC-12: Air Vents and Ducts

Dust from Pilot Plant operations are collected via dust collectors and HEPA filters under NJDEP Air Permit No. PCP050001. No outstanding air permit violations exist with respect to Cardinal's operation of their Pilot Plant, therefore, no sampling is recommended or warranted for this area.

## **APPENDIX H – DISCHARGE HISTORY OF HAZARDOUS SUBSTANCES AND WASTES**

On August 21, 2006, approximately four-liters of spilled methanol entered a trench drain near the subject property's Loading Docks A & B. Cardinal Health personnel contacted the NJDEP Spill Hotline and case number 06-08-21-1610-29 was issued. Due to the high ambient air temperature and high sunlight exposure, the spilled methanol reportedly evaporated at a rapid rate and did not migrate to the trench drain's discharge point in the facility's stormwater retention pond. Cardinal Health personnel observed no visible evidence of the spilled methanol at the end of the discharge pipe. Based on these observations, no further action was taken in response to the discharge nor did NJDEP request further action.

With respect to the protectiveness of past remedies pursuant to N.J.A.C. 7:26E-3.1(c) 1.ix, given that the spilled material did not migrate beyond the concrete trench drain and that the material volatilized rapidly, the remedy appears to have remained protective of public health, safety and the environment.

## **APPENDIX I – OTHER ENVIRONMENTAL PERMITS**

SGS Thomson Microelectronics maintained Permit No. 07006 to discharge industrial wastewater to the Middlesex County Utilities Authority sanitary sewer system. This permit was issued on March 1, 1988 and expired on February 28, 1993.

Cardinal Health maintains Permit No. 7178 to discharge wastewater to the Middlesex County utilities authority sanitary sewer system. This permit was initially issued on February 1, 2002 and is currently due to expire on January 31, 2012.

P357

**DRINKER BIDDLE & REATH LLP**  
A PENNSYLVANIA LIMITED LIABILITY PARTNERSHIP  
500 CAMPUS DRIVE  
FLORHAM PARK, NJ 07932

**BROWN BROTHERS HARRIMAN & CO.**  
PRIVATE BANKERS  
1531 WALNUT STREET  
PHILADELPHIA, PA.

1-480/280

4003

**PAY TWO HUNDRED FIFTY DOLLARS AND NO CENTS**

TO THE  
ORDER OF

Treasurer, State of New Jersey

DATE

8/3/07

AMOUNT

\$250.00

*[Signature]*

VOID AFTER 6 MONTHS

014287  
20070038

⑈004003⑈ ⑆026004802⑆ 348561⑈ 2⑈

E20070038  
PI# 014287

Divis. of Responsible Party Site Remediation  
Industrial Site Recovery Act

## INITIAL NOTICE FEE SUBMITTAL FORM

Case # (if known) \_\_\_\_\_

Case Name (Active Case) The Franklin Township Site, Cardinal Health 406, LLC, E20070038, PI# 014287Check drawn from the account of Drinker, Biddle & Reath LLP Check/M.O. # 4003Amount Enclosed \$ 250.00

Please circle the appropriate payment location(s)

- |    |                               |          |            |
|----|-------------------------------|----------|------------|
| 1. | General Information Notice    | \$100.00 |            |
| 2. | Preliminary Assessment Report | \$250.00 |            |
| 3. | Site Investigation Report     | \$500.00 |            |
| 4. | Negative Declaration Review   | \$100.00 |            |
| 5. | Expedited Review Application  | \$150.00 | (see note) |

**Note: This fee is not intended to "expedite" the review of a Preliminary Assessment or Site Investigation Report. All reports are reviewed in the order received by the department.**

- |     |   |           |
|-----|---|-----------|
| 6.  | Remediation in Progress Waiver Application            | \$150.00  |
| 7.  | Regulated Underground Storage Tank Waiver Application | \$400.00  |
| 8.  | Area of Concern Waiver Application                    | \$100.00  |
| 9.  | Limited Site Review Application                       | \$350.00  |
| 10. | Applicability Determination Application               | \$200.00  |
| 11. | De minimis Quantity Exemption Application             | \$200.00  |
| 12. | Limited Conveyance Application                        | \$400.00  |
| 13. | Remediation Agreement Application                     | \$1000.00 |
|     | Remediation Agreement Amendment Application           | \$500.00  |
| 14. | Confidentiality Claim                                 | \$250.00  |
| 15. | Remedial Action Workplan Deferral Application         | \$650.00  |

**Note:** All applicable fees are due with the submission of each document. Each document requires a separate review fee. Review fees are for a single review. The submission of a revised document in response to deficient submission will require a separate review fee. Fees are not transferable or refundable once a requested review has been completed or written a determination has been made by the Department.

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### **FIGURE**

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- 2 Site Layout Plan with AOCs
- 3 Proposed/Attempted Soil Boring Location Map

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- A Microwave Semiconductors Corporation Site Plan (January 28, 1986)
- B Results of Geophysical Investigation (NAEVA Geophysics, Inc.)
- C Soil Boring Logs



**CERTIFICATION:**

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information, and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of N.J.S.A 13:1K-6 et seq., I am personally liable for the penalties set forth at N.J.S.A. 13:1K-13.

Typed/Printed Name CHARLES ECHOLS

Title VP EHS, CARDINAL HEALTH

Signature Charles A Echols

Date 8/9/07

Sworn to and Subscribed Before Me on this 9<sup>th</sup> day of August 2007

Date of 8-9 2007

Kristen D Miller  
Notary



KRISTEEN D. MILLER  
Notary Public, State of Ohio  
My Commission Expires 02-17-09

## 1.0 INTRODUCTION

This report presents the results of a Site Investigation (SI) performed by URS Corporation (URS) on behalf of Cardinal Health, Inc. (Cardinal) at their facility in Franklin Township, Somerset County, New Jersey. Field activities were performed on June 27, 2007 and July 6, 2007.

This SI was carried out at the request of Cardinal, as recommended in the Preliminary Assessment Report (PAR). The purpose of this SI was to conduct soil investigation activities at certain potential areas of concern (AOC) identified during the Preliminary Assessment. The SI activities detailed herein were conducted in general accordance with the NJDEP *Technical Requirements for Site Remediation*, as specified in the New Jersey Administrative Code (N.J.A.C.), Section 7:26E.

## **2.0 BACKGROUND**

### **2.1 SITE LOCATION**

The Cardinal Health facility is located at 14 Schoolhouse Road in Franklin Township, Somerset County, New Jersey. Its location is shown on Figure 1, plotted on a portion of the United States Geological Survey (U.S.G.S.) Bound Brook, New Jersey, 7.5-Minute Topographic Quadrangle Map.

### **2.2 SITE DESCRIPTION AND HISTORY**

The subject property consists of a 265,000 square foot facility, including a 80,000 square foot pilot plant. The subject property is located on the south side of Schoolhouse Road and is currently identified as 14 Schoolhouse Road, Franklin Township, Somerset County, New Jersey.

Based on a review of available records, the subject property was farmland until Microwave Semiconductor Corporation (MSC) began operating on-site as a division of Siemens MC, Inc. (Siemens) in 1969 as an independent merchant supplier of microwave power semiconductors and modules. MSC designed, assembled, and tested silicon microwave power semiconductors, system components, and subsystems for advanced telecommunication, radar, and electronic warfare applications. MSC's facility consisted of a "south building" and a process building on the southern side of Schoolhouse Road (Block 517, Lot 20.01) and a "north building" and a pole barn on the northern side of Schoolhouse Road (Block 514, Lot 20.01).

A potential sale of property and business triggered ECRA Case No. 88B51. A Negative Declaration Affidavit submitted by MSC was approved by NJDEP on March 27, 1989.

SGS-Thomson Microelectronics, Inc. (SGS) purchased Microwave Semiconductor Corporation from Siemens on October 10, 1989. The transaction transferred the real estate on the northern side of Schoolhouse Road and the business on both sides of the road to SGS. However, Siemens maintained ownership of the real estate on the southern side of Schoolhouse Road, thereby rendering it a separate entity from the northern and subsequently leased it to SGS. MSC's operations under SGS's ownership remained as described above. The business and partial property transfer triggered ECRA Case No. E89560. Several areas of concern on the northern portion (Block 517, Lot 20.01) of Siemens' facility were subject to further investigation including a chemical waste storage area where impacted soil was removed and a groundwater Classification Exception Area was established for 1,1-dichloroethene and 1,1,1-trichloroethane. A Letter of No Further Action was issued by NDJEP on September 12, 1996. It should be noted that the northern parcel that was subject to additional investigation is not

owned or operated by Cardinal Health. The northern parcel is currently known as 25 Schoolhouse Road (Block 517.02, Lot 20.01) and is owned by Triple Net Inv. CLP c/o OFS Fitel LL.

SGS terminated their lease with Siemens on December 13, 1990, which triggered ECRA Case No. 90617. A Negative Declaration Affidavit submitted by SGS was approved by NJDEP on March 20, 1991.

Cardinal Health began operating at the site in 2002 with a full range of pharmaceutical services including drug development, formulation of innovative delivery technologies, and clinical manufacturing. As a full-service, drug-development facility, Cardinal's facility supports both large and small pharmaceutical and biotechnology companies throughout the drug development process. The 265,000 square foot facility includes an 80,000 square foot pilot plant for producing clinical supplies such as softgels, oral solid and liquid dosages, and Zydys products.

## **2.3 SITE PHYSICAL SETTING**

### **2.3.1 Topography**

Topographic map coverage of the subject property is provided by the United States Geological Survey (USGS) "Bound Brook, New Jersey" 7.5-minute quadrangle map (1995). Topographic relief across the site is relatively flat, with the elevation of the subject property at approximately 90 feet above NGVD (National Geodetic Vertical Datum).

### **2.3.2 Soil**

The site, which is located at an elevation of approximately 90 feet, is situated, according to the Engineering Soil Survey of Somerset County, upon soils formed from the underlying Passaic Formation. The soil types are silts with silty clays in the topographic depressions. According to the Engineering Soil Survey of Somerset County, the soil type has been classified as the Penn and Croton Correlated Agronomic Series.

### **2.3.3 Geology**

The site is located in the Newark Basin of the Piedmont Plateau Physiographic Province. The geology is characterized by northwestward dipping shales, siltstones and sandstones of Triassic and Jurassic age (245 million years to 144 million years) with some igneous basalt extrusions and diabase intrusions of Jurassic age. The topography of the province underlain by the sedimentary rocks is characterized by a broad, southeastward sloping and gently rolling lowland

with an average elevation of 200 to 400 feet. Above the lowland surface, the basaltic intrusions make up the higher elevations ranging from 450 to 879 feet above sea level.

The site, which is situated upon residual soils of the underlying Passaic Formation. The Passaic Formation is a Lower Jurassic and Upper Triassic unit of the Brunswick Group. The formation is predominantly grayish-red to reddish-brown, evenly to irregularly bedded, thin-to thick-bedded shale, siltstone, very fine to coarse-grained sandstone, and red-matrix conglomerate. According to the Engineering Soil Survey of Somerset County, New Jersey (1953), the depth of the underlying Passaic Formation is approximately 2 to 6 feet. The top of bedrock at this depth consists of fractured red shale.

#### **2.3.4 Hydrogeology**

The local topography, geology and surficial drainage patterns are tools used to evaluate the properties of local shallow groundwater flow. Groundwater in the site area probably occurs under water table conditions within the overlying soils/weathered bedrock. The depth to the seasonally high water table is more than 4 feet. Groundwater probably occurs in shallow bedrock at depths greater than 10 feet below grade; however, the volumes of water stored and the properties of the groundwater in the underlying Passaic Formation are highly variable, depending on the interconnection of solution channels, fractures and bedding planes. Based on the topography and surficial drainage patterns shown on the 1954 (photo-revised 1995) United States Geological Survey (USGS) Bound Brook, New Jersey, 7.5-minute series quadrangle map, it appears that the general direction of shallow groundwater flow is southeastwardly towards a northeasterly-flowing unnamed tributary. A hydrogeologic investigation would be needed in order to delineate the precise directions of shallow and bedrock groundwater flow and the depth to both shallow and bedrock groundwater in the vicinity of the site.

#### **2.3.5 Surface Water**

There are no surface water bodies on the subject property. The closest water body is an unknown tributary, which is approximately 24,000 feet southeast of the subject property.

### 3.0 PROGRAM METHODOLOGY

The activities conducted during the SI were performed in accordance with the following NJDEP regulatory guidelines:

- NJDEP "Field Sampling Procedures Manual" dated August 2005.
- NJDEP "Technical Requirements For Site Remediation" effective July 1, 1993, and re-adopted December 17, 2002 (New Jersey Administrative Code [NJAC] Chapter 7:26).
- NJDEP Soil Cleanup Criteria (SCC) listed in the February 3, 1992, proposed rule entitled "Cleanup Standards For Contaminated Sites" NJAC 7:26, last revised May 12, 1999.

Field activities were carried out on June 27, 2007 and July 6, 2007. Public utilities servicing the facility were marked out by "Call Before you Dig". Due to the potential for unmapped underground utility lines, geophysical surveys using ground-penetrating radar and an electromagnetic metal-detector was completed prior to the subsurface investigation. The geophysical survey were performed by Naeva Geophysical of Congers, New York. Environmental Probing Investigations, Inc. (EPI) of Cream Ridge, New Jersey, conducted the Geoprobe soil drilling. A URS environmental scientist/geologist observed field activities, assessed soil conditions, and conducted field-screening using a calibrated organic vapor meter (OVM).

## **4.0 SITE INVESTIGATION ACTIVITIES**

### **4.1 INTRODUCTION**

URS performed the field investigation portion of the SI, as recommended in the PAR on June 27, 2007 and July 6, 2007. The scope of work followed New Jersey *Technical Requirements for Site Remediation*, N.J.A.C. 7:26E.

### **4.2 AOC 2B – Unspecified Hazardous Substance UST**

A 1,000-gallon single wall steel UST was reportedly installed along Schoolhouse Road in 1976. This UST reportedly contained an unspecified hazardous substance and did not have spill recovery, overfill protection, or spill containment. According to available documents, the UST was removed on August 7, 1987. Information regarding the integrity of the removed UST or the subsurface surrounding the former UST was not available for review. The exact location of the UST was not found in any records reviewed. One Microwave Semiconductor Corporation site plan (January 28, 1986) obtained from an NJDEP file review had the tank sketched by hand onto the figure. This site plan is provided in Appendix A.

In an effort to locate the possible 1,000-gallon unspecified hazardous substance UST and to mark out detectable subsurface utilities and features, Naeva Geophysics (Naeva) of Cogners, New York performed a geophysical investigation on June 27, 2007. Naeva employed an electromagnetic metal-detector, ground penetrating radar (GPR), and utility location instruments to conduct the investigation. The area of investigation was approximately 240 feet by 80 feet in size along the northern portion of the subject property. The results of the geophysical investigation are provided in Appendix B. Naeva did locate an anomaly large enough (approximately 8-feet by 11-feet) to possibly represent the UST in the area in which the UST was sketched on the site plan obtained from NJDEP.

On July 6, 2007, URS and EPI attempted to conduct soil drilling and sampling activities in the footprint of the suspect AOC. The proposed sampling location map is provided in this report (Figure 3). Pursuant to the Technical Requirements for Site Remediation (N.J.A.C. 7:26E-3.9), a total of 4 soil borings and samples were proposed along the centerline of the former UST (located by Naeva). It was assumed that the former 1,000-gallon UST was installed 3-feet below ground surface. Soil samples were to be collected from 7.0-7.5 feet below ground surface (at the invert). Collected samples were to be analyzed for priority pollutant volatile organic compounds with forward library search (VOC+15), priority pollutant base neutral compounds with forward library search (BN+25), priority pollutant metals (PP Metals), PCBs and total Petroleum Hydrocarbons.

EPI began to drill soil boring location SB-2B-1 (see Figure 3). Refusal was encountered at approximately 4 feet bgs. URS classified the soil on a soil boring log, which is provided in Appendix C. Soils encountered consisted of reddish brown silt with trace clay from ground surface to depth of refusal. No fill material or visual evidence of buried concrete or concrete debris was observed. Neither OVM readings above background levels nor stained/discolored soil were observed. Due to refusal, EPI attempted to drill soil boring location SB-2B-2 (see Figure 3). Refusal was encountered at 3 feet bgs. EPI attempted to drill at two additional and different locations in the area of the former UST. In both additional attempts, refusal was encountered at 3 to 4 feet bgs. The soil in each of these attempted borings are natural soils with weathered shale at the terminus of the boring. It appears that shallow bedrock occurs at 3 to 4-feet bgs in this area of the site. Since field observations and field instrument readings did not indicate impacts to soil and since refusal was encountered at depths significantly above the anticipated tank invert depth, URS did not collect any soil samples.

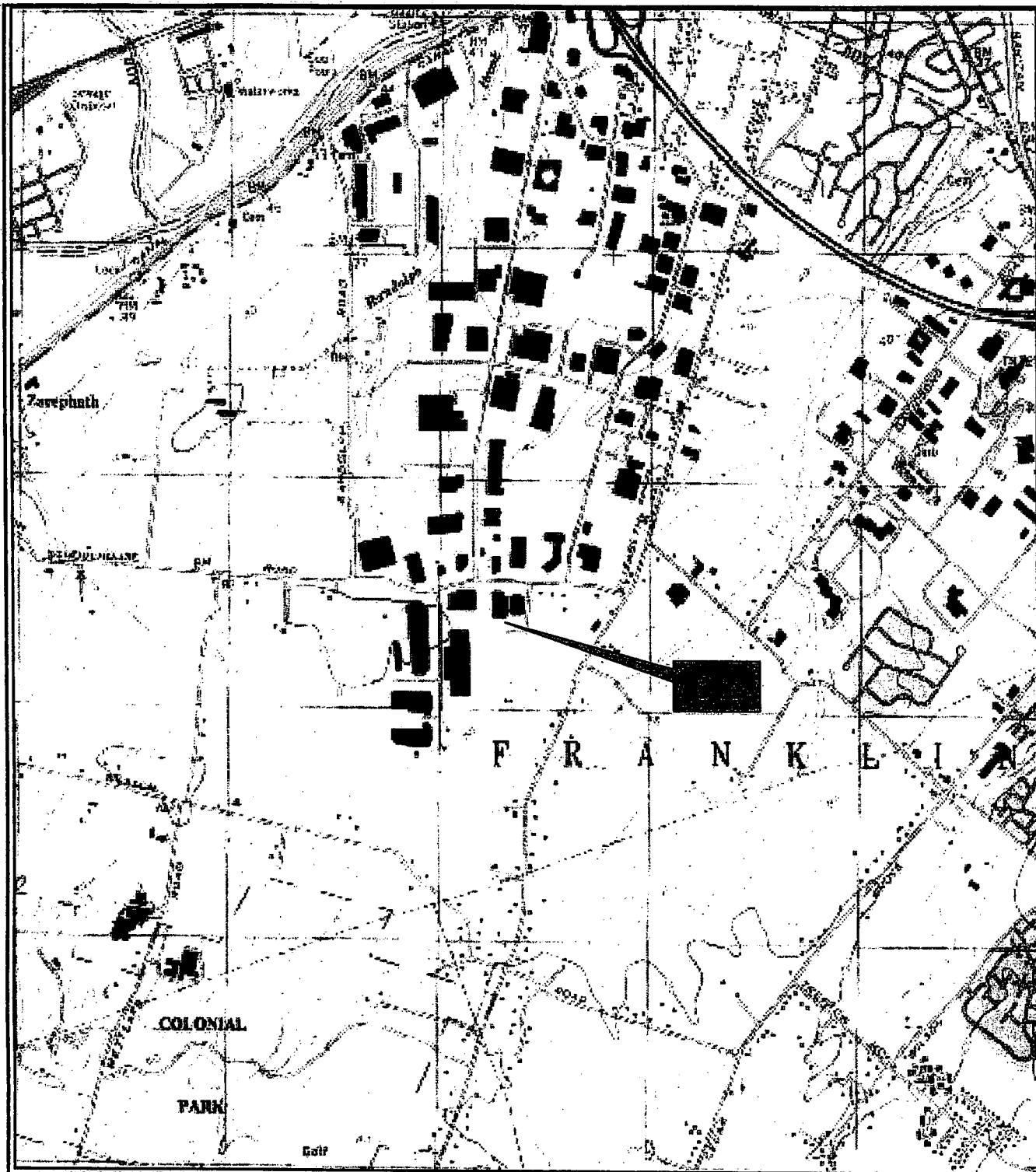
### Findings

✓ During the soil investigation at this AOC, refusal was encountered at 3 to 4-feet bgs in several locations. It is believed that the overlying soil is natural soil and that the suspect UST was not located in the area investigated. There is no other information available pertaining to the former UST and no other potential locations were identified. Based upon the shallow bedrock encountered adjacent to Schoolhouse Road, it is likely that no UST was installed at this area of the site. Based upon the findings, no further action is recommended.



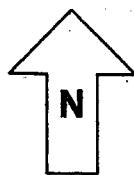
## 5.0 RECOMMENDATIONS

During the soil investigation in the vicinity of the suspect former hazardous substance UST (AOC-2B), refusal was encountered at 4-feet bgs in several locations. It is believed that the overlying soil encountered during the SI activities is natural soil. Additionally, based upon the shallow depth to bedrock, it is unlikely that a UST would have been installed in this area. There is no other information available pertaining to the former UST. Based upon these findings, Cardinal requests that a No Further Action determination be issued by the NJDEP for AOC-2B.



**FIGURE 1 – SITE LOCATION MAP**

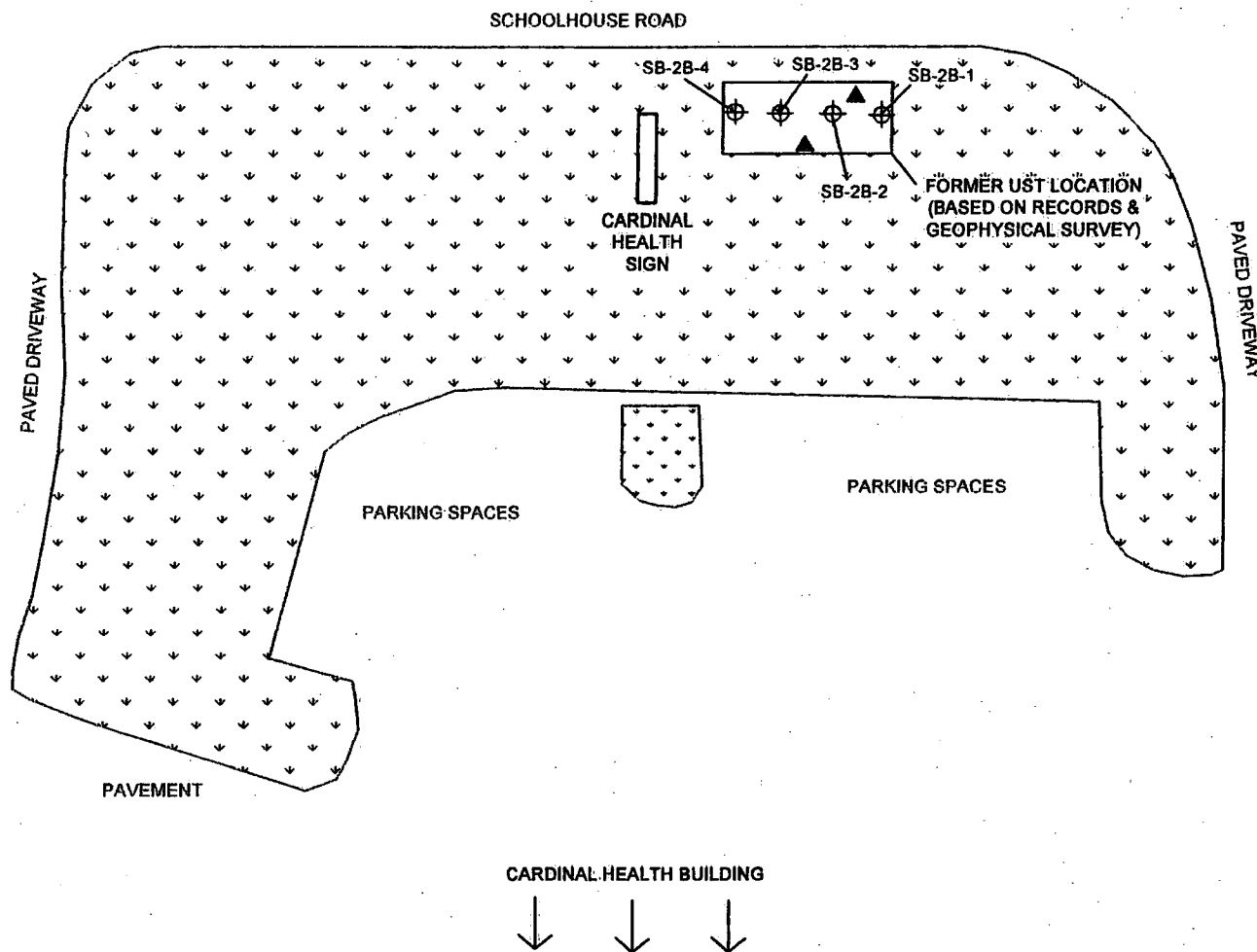
**URS**



**SITE NAME:** Cardinal Health 406, LLC  
**ADDRESS:** 14 Schoolhouse Road  
**BOROUGH, STATE, ZIP:** Franklin Township, Somerset Co., NJ  
**URS PROJECT NO.:** 11130076  
**SCALE:** 1 : 24,000

U.S.G.S. Bound Brook, N.J.  
 Quadrangle 1995





## LEGEND



Grass



Proposed Soil Boring Location



Additional Attempted Soil Boring Location

## NOTES:

Drawing not to scale.  
All locations are approximate.

Title: PROPOSED/ATTEMPTED SOIL BORING LOCATION MAP  
Location: 14 SCHOOLHOUSE ROAD  
FRANKLIN TOWNSHIP, NEW YORK  
Client: CARDINAL HEALTH, INC.

**URS**

URS Corporation  
28 Corporate Drive, Suite 200  
Clifton Park, New York 12005

Drafter: DAD	Date: August 2007
Dwg. Size: 8.5 x 11	Job No.: 11130076

**FIGURE 3**

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## **Results of Geophysical Investigation**

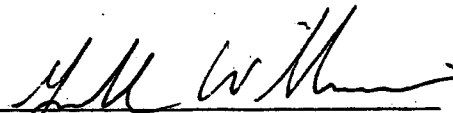
**Cardinal Health Facility  
14 Schoolhouse Road  
Somerset, New Jersey**

**Prepared for: URS Corporation  
12 Commerce Drive  
Cranford, New Jersey**

**Date of Investigation: June 27, 2007**

---

**Prepared by:**

  
Gerald Williamson  
Geologist  
NAEVA Geophysics, Inc.  
50 North Harrison Avenue Suite 11  
Congers, New York 10920

### **Contents**

**Introduction**

**Methods**

**Results**

**Figure 1 Results of a Geophysical Investigation Conducted at the  
Cardinal Health Facility at 14 Schoolhouse Road in  
Somerset, New Jersey**

**Figure 2 GPR Profile A, Collected From South to North Across  
Short Axis**

**Figure 3 GPR Profile B, Collected From East to West Across Long  
Axis**

**Results of Geophysical Investigation  
Cardinal Health Facility  
14 Schoolhouse Road  
Somerset, New Jersey**

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**Introduction** On June 27, 2007, NAEVA Geophysics conducted a geophysical investigation on a portion of the Cardinal Health Facility located at 14 Schoolhouse Road in Somerset, New Jersey. The purpose of the investigation was to mark out the surface trace any Underground Storage Tanks (USTs), as well as any detectable utilities within the area of investigation.

The area of investigation was approximately 240 feet by 80 feet in size, along the northern edge of the parking lot located in the northern portion of the property (see Figure 1). The area was covered with grass and free of surface obstructions.

---

**Methods** The equipment selected for this investigation included a Fisher TW-6 Pipe and Cable Locator (an electromagnetic (EM) metal-detector), a Subsite 950 utility locator, a 3M Dynatel 2273 line locator, and a Sensors & Software Noggin 250 ground-penetrating radar (GPR) unit.

The area was first investigated using the TW-6 metal-detector. The metal-detector was used in a reconnaissance investigation for evidence of metallic objects that could represent underground storage tanks (USTs) or other subsurface features. The instrument was carried along bi-directional traverses spaced approximately three feet apart across the area of investigation.

GPR was used in a reconnaissance investigation for evidence of USTs and other subsurface features, as well as to further investigate significant metal anomalies. GPR data profiles were collected along bi-directional traverses spaced approximately three feet apart across the area of investigation, and across each significant metal anomaly. These data profiles were then examined for evidence of reflections that could be indicative of tanks or other subsurface features.

The Subsite 950 and Dynatel 2273 were used to delineate the surface trace of subsurface utilities located within the area of investigation. Radio frequency signals were conducted onto the lines where they were exposed at the surface. This allowed an operator using a specialized receiver to delineate the lines by tracing the signals at the surface.

Metallic lines to which electric lines are grounded produce electromagnetic fields that may be detectable at the surface. In addition, buried metallic lines often pick up and radiate background vibrations and commercial radio signals. The area was searched for evidence of these passive signals using the Subsite 950.

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**Results:**

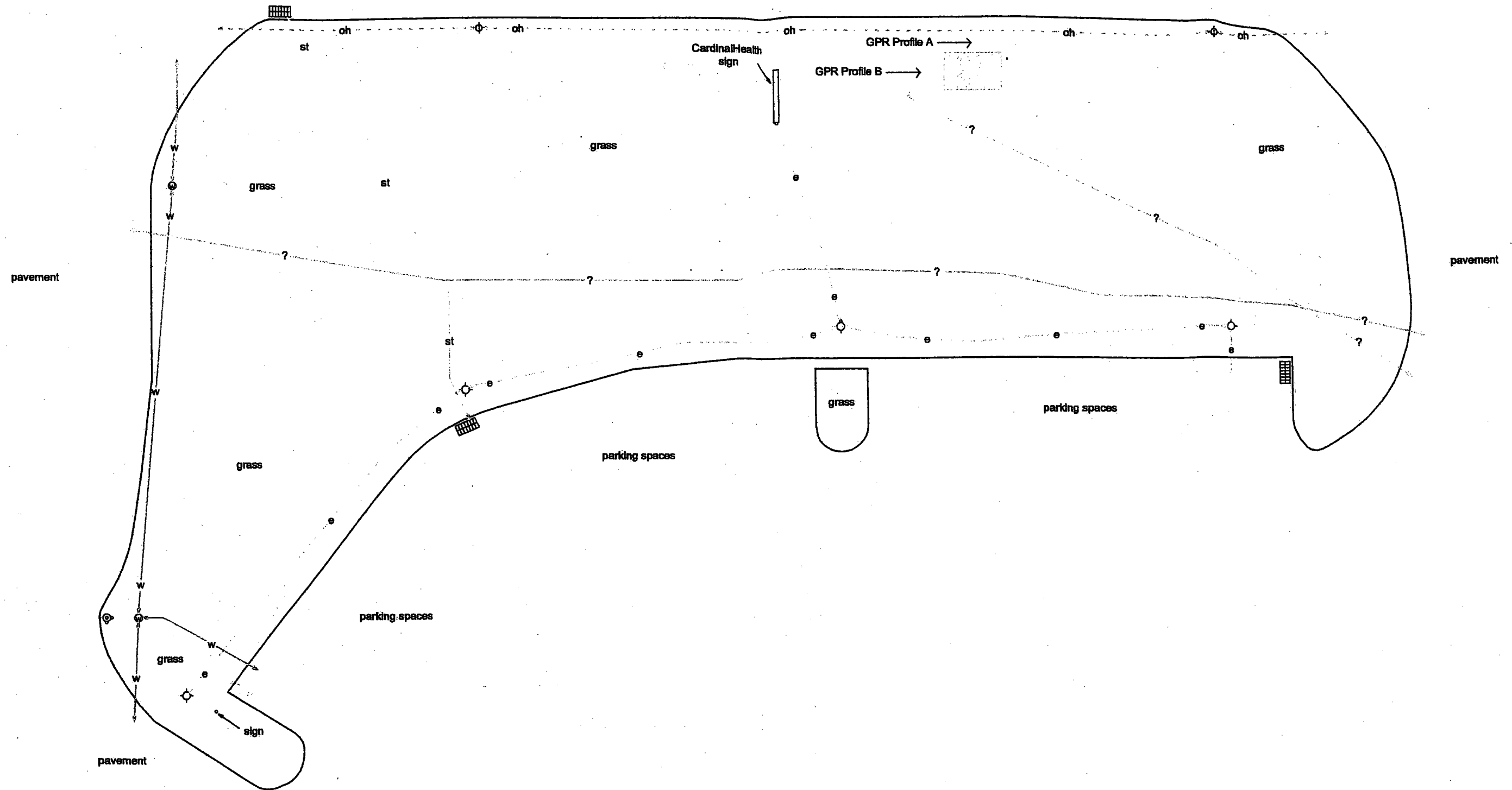
One significant GPR anomaly was identified within the northern section of the area of investigation. The anomaly was approximately 8 feet by 11 feet in size, and located just east of the Cardinal Health Facility sign (see Figure 1). GPR data profiles collected across the short axis and long axis of the anomaly displayed a long flat reflection with a depth of approximately 2.5-3 feet (see Figures 2 and 3). This type of reflection could represent a buried concrete pad, or a UST encased in a concrete block. There was no metal anomaly detected within the GPR anomaly, which suggests the anomaly may be a concrete pad, possibly a foundation for a former storage tank. It should be noted that USTs are made of fiberglass as well as metal, and may not be detectable with a metal detector. The surface trace of the anomaly was marked on the ground with pink spray paint. If further characterization of this anomaly is required, NAEVA recommends careful excavation of the area.

Water lines, electric lines, and storm drains were identified within the area of investigation. A water line was traced along the western edge of area of investigation. Several electric lines were traced between light poles located along the southern edge of the area of investigation. An electric line was also traced from the Cardinal Health Facility sign to one of the light poles. A storm drain was located within the western portion of the area, running between a catch basin located in the parking lot to a catch basin located in Schoolhouse Road.

Two lines of undetermined use were identified within the area. One ran east to west, across the middle portion of the area of investigation. This line maybe an old electrical line associated with former electronic gates that once existed at the entrances to the parking lot. The second unknown line ran from the parking lot in the southeast corner of the area to the northwest, towards the GPR anomaly. It is unknown if this conduit is associated with the GPR anomaly, or an unrelated underground utility.

All underground utilities were marked on the ground with spray paint using the color code established by the American Public Works Association (green for sewer, blue for water, etc.).

# Schoolhouse Road



## LEGEND

—•—	electric line	⊕	water valve	▒	catch basin
—w—	water line	⊗	fire hydrant	▒	GPR Anomaly
—st—	storm sewer	⊙	parking lot lamp		
—?	suspected utility	⊕	utility pole		
—oh—	overhead line	○	electrical conduit		



**NACVA** GEOPHYSICS, INC.  
THE LEADER IN SUBSURFACE DETECTION  
Subsurface Geophysical Surveys

50 N. Harrison Avenue, Suite 11  
Congers, NY 10920  
(845) 288-1800  
(845) 288-1802 FAX

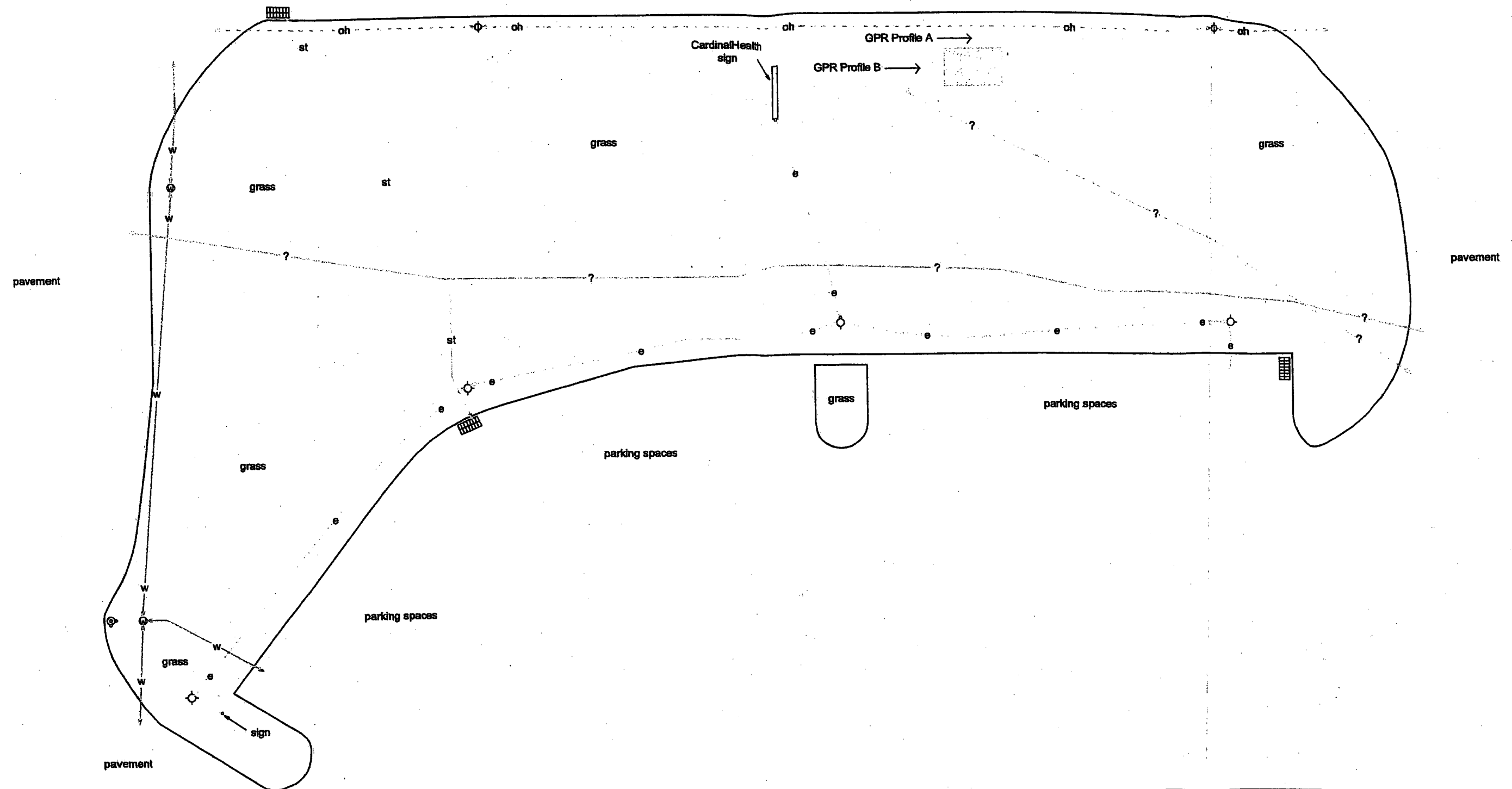
Figure 1: Results of a Geophysical Investigation conducted at the Cardinal Health Facility at 14 Schoolhouse Road in Somerset, New Jersey.

Client	URS Corporation	Date of Work	June 27, 2007
Project No.	C0706271X	Map By	Kyle Keator

ALL UNDERGROUND UTILITIES MAY NOT BE DEPICTED ON THIS MAP



# Schoolhouse Road



## LEGEND

e	electric line	⊕	water valve	▒	catch basin
w	water line	⊗	fire hydrant	▒	GPR Anomaly
st	storm sewer	⊙	parking lot lamp		
?	suspected utility	⊕	utility pole		
oh	overhead line	○	electrical conduit		



20 10 0 10 20 ft  
Scale: One inch equals approximately twenty feet

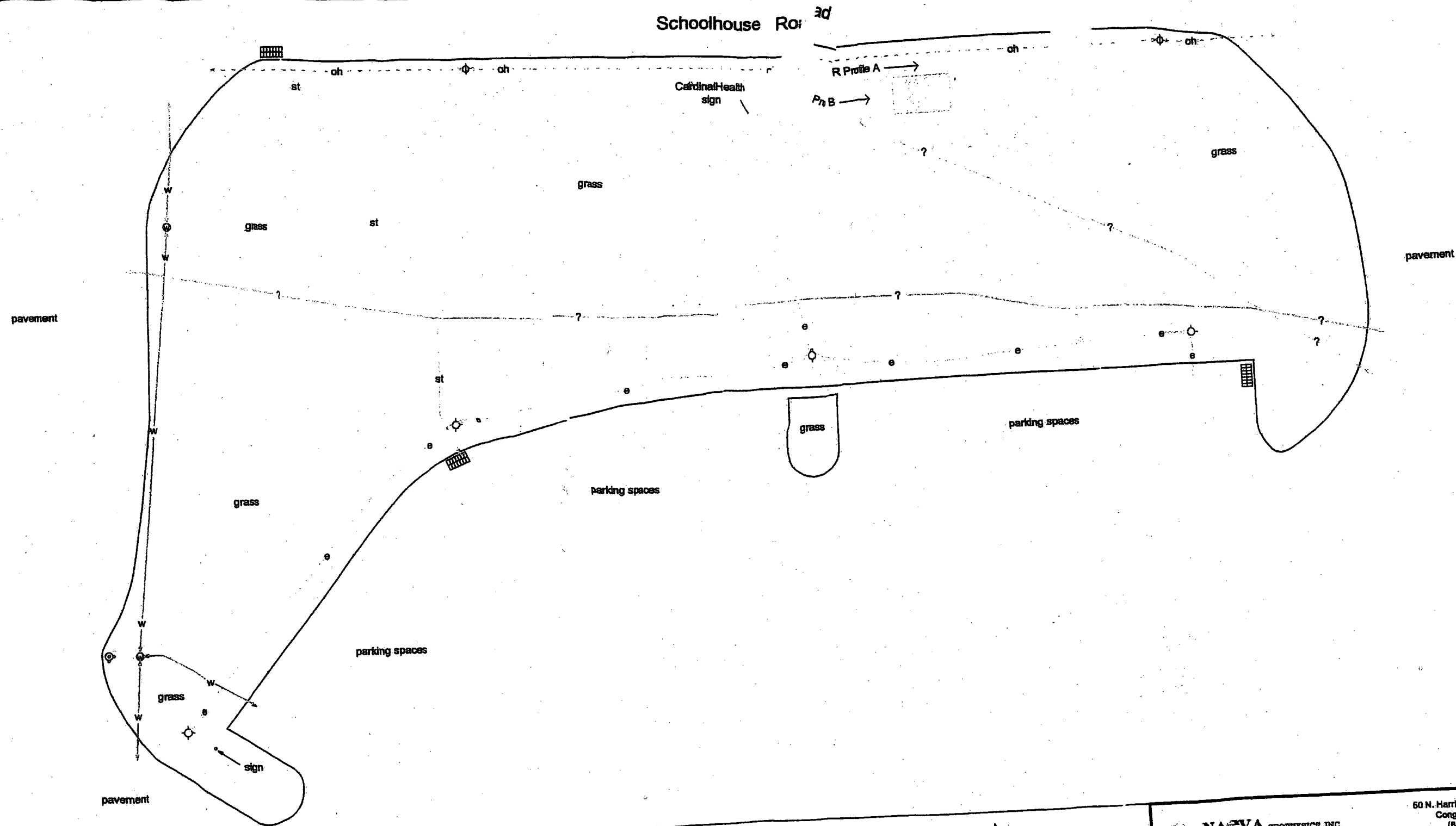
**NAEVA** GEOPHYSICS, INC.  
THE LEADER IN SUBSURFACE INVESTIGATIONS  
Subsurface Geophysical Surveys

50 N. Harrison Avenue, Suite 11  
Congers, NY, 10920  
(845) 268-1800  
(845) 268-1802 FAX



Figure 1: Results of a Geophysical Investigation conducted at the Cardinal Health Facility at 14 Schoolhouse Road in Somerset, New Jersey.

Client	URS Corporation	Date of Work	June 27, 2007
Project No.	C0706271X	Map By	Kyle Keator

ALL UNDEVELOPED FACILITIES MAY NOT BE DEPICTED ON THIS MAP



# LEGEND

— e —	electric line	⊕	water valve		catch basin
— w —	water line	⊗	fire hydrant		GPR Anomaly
— st —	storm sewer	⊙	parking lot lamp		
— ? —	suspected utility	⊕	utility pole		
— oh —	overhead line	○	electrical conduit		

**NACVA** GEOPHYSICS, INC.  
THE LEADER IN SUBSURFACE GEOPHYSICAL SURVEYS  
 Subsurface Geophysical Surveys

60 N. Harrison Avenue, Suite 11  
 Congers, NY, 10920  
 (845) 268-1800  
 (845) 268-1802 FAX

Figure 1: Results of a Geophysical Investigation conducted at the  
 Cardinal Health Facility at 14 Shoolhouse Road in Somerset,  
 New Jersey.

Client	URS Corporation	Date of Work	June 27, 2007
Project No.	C0708271X	Map By	Kyle Keator

ALL UNDERGROUND UTILITIES MAY NOT BE DEPICTED ON THIS MAP

12 COMMERCE DRIVE, CRANFORD, NEW JERSEY

# URS

**PRELIMINARY ASSESSMENT REPORT**  
**CARDINAL HEALTH, INC.**  
**14 SCHOOLHOUSE ROAD**  
**FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY**  
**ISRA CASE No. E20070038**

**PREPARED FOR:**  
**CARDINAL HEALTH, INC.**

**AUGUST 1, 2007**  
**URS PROJECT NO. 11130076**

DRINKER BIDDLE & REATH LLP  
A PENNSYLVANIA LIMITED LIABILITY PARTNERSHIP  
500 CAMPUS DRIVE

BROWN BROTHERS HARRIMAN & CO.  
PRIVATE BANKERS  
1531 WALNUT STREET  
PHILADELPHIA, PA 19102

4002

1-800-260

PAY

TO THE  
ORDER OF

FIVE HUNDRED DOLLARS AND NO CENTS

Treasurer, State of New Jersey

DATE

8/3/07

AMOUNT

\$500.00

VOID AFTER 6 MONTHS

014287  
2007003 8

⑈004002⑈ ⑆026004802⑆ 348561⑈2⑈

*D. H. H.*



URS Corpor  
12 Commerce Drive  
Cranford, New Jersey 07016

908.272.8300 Tel  
908.272.3940 Fax

E20070038  
PI#014287

## LETTER OF TRANSMITTAL

Transmittal No.: \_\_\_\_\_

Work Item: \_\_\_\_\_

Date: August 14, 2007

To: NJDEP: Bureau of Risk Management, Initial  
Notice, and Case Assignment

P.O. Box 435  
East State Street

Trenton, New Jersey 08625-0435

Attn: Pei C. Huang

Project No. 11130076.00001

Project: Cardinal Health - Somerset, NJ

Subject: Site Investigation Report

We are sending you the  
following items:

☒ attached

☐ under separate cover

via

☐ Courier

☒ Fed Ex

☐ USPS

☐ Plan(s)

☐ Specification(s)

☒ Report(s)

☐ Print(s)

☐ Calculations/Data

☐ Test Result(s)

☐ Proposal Request

☐ Estimate(s)

☐ Copy of Letter Transmittal

☐ Invoice

Qty.	Date	Description
3		Site Investigation Reports
1		Submittal Fee Form with \$500 check

☐ For your approval

☒ For your review & comments

☐ For your information

☐ For your signature

☐ For your use

☐ For your quotation

☐ Approval / comments as noted

☐ As requested

☐ Returned

☐ Executed

☐ Response requested

☐ Please return

Remarks: \_\_\_\_\_

Signed: Nicole M. Reese

cc: \_\_\_\_\_

Title: Environmental Scientist

AUG 16 2007

**Divis. of Responsible Party Site Remediation  
Industrial Site Recovery Act**

**INITIAL NOTICE FEE SUBMITTAL FORM**

Case # (if known) \_\_\_\_\_

Case Name (Active Case) The Franklin Township Site, Cardinal Health 406, LLC, E20070038, P1# 014287

Check drawn from the account of Drinker, Biddle & Reath LLP Check/M.O. # 4002

Amount Enclosed \$ 500.00

**Please circle the appropriate payment location(s)**

- |    |                               |          |            |
|----|-------------------------------|----------|------------|
| 1. | General Information Notice    | \$100.00 |            |
| 2. | Preliminary Assessment Report | \$250.00 |            |
| 3. | Site Investigation Report     | \$500.00 |            |
| 4. | Negative Declaration Review   | \$100.00 |            |
| 5. | Expedited Review Application  | \$150.00 | (see note) |

**Note: This fee is not intended to "expedite" the review of a Preliminary Assessment or Site Investigation Report. All reports are reviewed in the order received by the department.**

- |     |   |           |
|-----|---|-----------|
| 6.  | Remediation in Progress Waiver Application            | \$150.00  |
| 7.  | Regulated Underground Storage Tank Waiver Application | \$400.00  |
| 8.  | Area of Concern Waiver Application                    | \$100.00  |
| 9.  | Limited Site Review Application                       | \$350.00  |
| 10. | Applicability Determination Application               | \$200.00  |
| 11. | De minimis Quantity Exemption Application             | \$200.00  |
| 12. | Limited Conveyance Application                        | \$400.00  |
| 13. | Remediation Agreement Application                     | \$1000.00 |
|     | Remediation Agreement Amendment Application           | \$500.00  |
| 14. | Confidentiality Claim                                 | \$250.00  |
| 15. | Remedial Action Workplan Deferral Application         | \$650.00  |

**Note:** All applicable fees are due with the submission of each document. Each document requires a separate review fee. Review fees are for a single review. The submission of a revised document in response to deficient submission will require a separate review fee. Fees are not transferable or refundable once a requested review has been completed or written a determination has been made by the Department.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Division of Remediation Support

## INDUSTRIAL SITE RECOVERY ACT

NEGATIVE DECLARATION AFFIDAVIT

This document shall be submitted with the preliminary assessment report, site investigation report or remedial action report when it has been demonstrated that there have been no discharges of a hazardous substance or hazardous waste at the industrial establishment or that any discharged hazardous substance or hazardous waste on or emanating from the industrial establishment has been remediated in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E and any applicable remediation standards.

1. Case # E20070038
2. A. Industrial Establishment  
Name of Business Cardinal Health 406, LLC  
Telephone # 732-537-6200  
Street Address 14 Schoolhouse Road  
City or Town Somerset State NJ Zip Code 088873  
Municipality Franklin Township County Somerset  
B. Tax Block Number(s) 514 Tax Lot Number(s) 20.04  
C. Does the Industrial Establishment include the Entire Site X or a Leasehold Portion  
\_\_\_\_\_ of the Block and Lots designated in 1B above (place an "X" after the correct designation).  
D. Standard Industrial Classification (SIC) Number 8731  
NAICS Number 541710  
E. Current Property Owner(s)  
Business Name Phoenix Charter LLC  
Contact Person c/o Edward A. Hogan, Esq.  
Telephone Number 908-722-0700  
Street Address P.O. Box 1018  
Municipality Somerville State NJ Zip Code 08876-1018

F. Current Business Owner

Business Name Phoenix Charter LLC

Contact Person c/o Edward A. Hogan, Esq.

Telephone Number 908-722-0700

Street Address P.O. Box 1018

Municipality Somerville State NJ

Zip Code 08876-1018

3. Transaction/Trigger (list all that apply)

☒ Sale of Property    ☒ Sale of Business    ☐ Sale of Assets  
☐ Cessation    ☐ Foreclosure    ☐ Bankruptcy  
☐ Partnership Situation Change    ☒ Stock Transfer/Corporate Merger    ☐ Other

If the trigger includes a Cessation of Operations, check the appropriate statement.

☐ no hazardous substance(s) are left on site

☐ hazardous substance(s) remain at the industrial establishment upon cessation (ex. fuel oil or raw product). Provide an attachment listing all hazardous substances remaining on site.

4. I hereby state that a preliminary assessment report, site investigation report and/or a remedial action report as applicable has been completed at the industrial establishment listed above, in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E as evidenced by either the attached or the previously submitted preliminary assessment report, site investigation report and/or a remedial action report as applicable and based on the preliminary assessment report, site investigation report and/or a remedial action report as applicable, (check the appropriate statement)

☒ there has been no discharge of a hazardous substance or hazardous waste on or from the industrial establishment; or

☐ any discharge(s) of a hazardous substance or hazardous waste on or from the industrial establishment have been remediated in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E and in accordance with any applicable remediation standards.

5. Please provide the name and mailing address of the property owner or business owner assuming the primary responsibility for the remediation of the referenced site subject to this filing. This is NOT the consultant or law firm hired to assist the owner or operator with their ISRA compliance obligations.

Does the listed individual or firm own the property ☐, business ☒, or both ☐? (Place a check in the appropriate space)

Name H. James Cline

Title Director, Environmental Affairs, Corporate EHS

Business or Firm Cardinal Health, Inc. Telephone # 614-757-7886



Street Address 700 Cardinal Place

Municipality Dublin

State OH

Zip Code 43017

6. CERTIFICATION:

The following certification shall be signed pursuant to the requirements of N.J.A.C. 7:26B-1.6(e).

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of N.J.S.A. 13:1K-6 et seq., I am personally liable for the penalties set forth at N.J.S.A. 13:1K-13.

Typed/Printed Name H. James Cline

Title: Director, Environmental Affairs

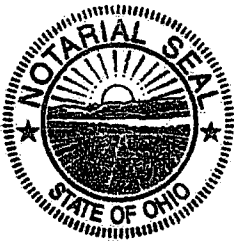
Signature [Handwritten Signature]

Date 6-26-2008

Sworn to and Subscribed Before Me

on this 26<sup>th</sup> Date of JUNE 20 08

Tanya Dulay [Handwritten Signature]  
Notary



TANYA DULAY  
Notary Public  
In and for the State of Ohio  
My Commission Expires  
3-18-2012

387

22

THE FACE OF THIS DOCUMENT HAS A VOID PANTOGRAPH AND MICROPRINTING. DO NOT CASH IF MISSING.

Cardinal Health

4100 Osuna Road NE  
Albuquerque, NM 87109  
(505) 761-1717

Wachovia Bank  
Savannah, GA 31603

64-975  
612

NO 10023270

PAY \*\*\* ONE HUNDRED FIFTY \*\*\*

DOLLARS

VOID AFTER 90 DAYS


06/27/2008

TO THE ORDER OF TREASURER STATE OF NEW JERSEY

USD

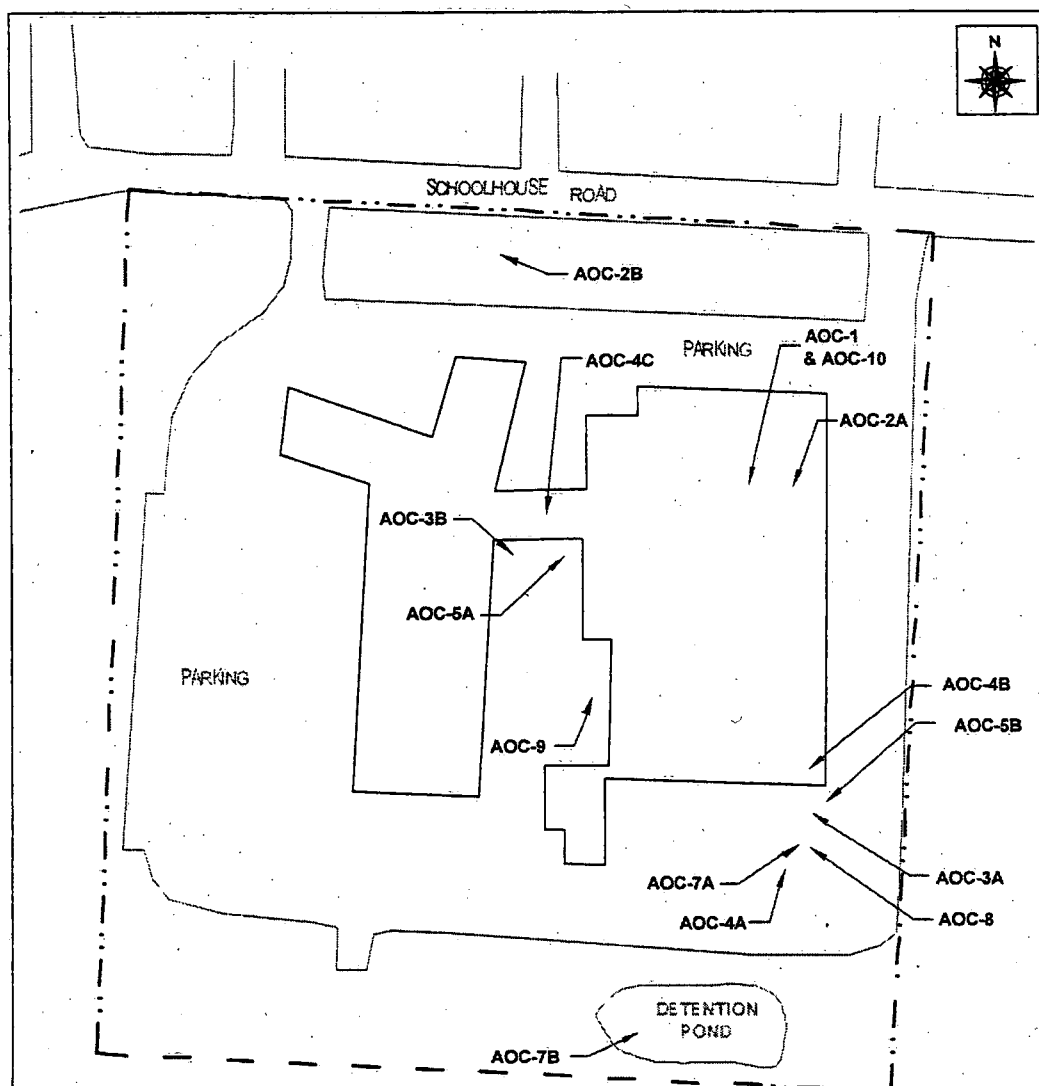
XXXXXXXXXX150.00

5000020667  
TREASURER STATE OF NEW JERSEY  
401 E STAT STREET 5TH FLOOR PO  
TRENTON NJ 08625

  
Jorge M. Gomez SVP & Treasurer

20070038

10023270 06120975612079900577662



AOC	DESCRIPTION
1	Aboveground Storage Tanks and Associated Piping
2 A,B	Underground Storage Tanks and Associated Piping
3 A,B	Loading and Unloading Areas
4 A,B,C	Hazardous Material Storage or Handling Areas
5 A,B	Dumpsters
6	Chemical Storage Cabinets or Closets
7 A,B	Storm Sewer Collection Systems and Detention Pond
8	Areas of Discharge per N.J.A.C. 7:1E
9	Electrical Transformers & Capacitors
10	Waste Treatment Area

**LEGEND**  
AOC-3A Area of Concern Location  
--- Approximate Site Boundary

**NOTES:**  
All Locations are approximate.

**SCALE:**  
Drawing not to Scale.

**Title:** SITE LAYOUT PLAN WITH AOCs  
**Location:** 14 SCHOOLHOUSE ROAD  
FRANKLIN TOWNSHIP, NEW JERSEY  
**Client:** CARDINAL HEALTH, INC.

**URS**  
URS Corporation  
28 Corporate Drive, Suite 200  
Clifton Park, New York 12065

**Drawn:** DAD  
**Date:** May 2008  
**Dep. Size:** 11x17  
**Job No.:** 11130078

**FIGURE 2**



Cardinal Health, Inc.  
7000 Cardinal Place  
Dublin, OH 43017

July 18, 2008

Pei Huang, Case Manager  
Bureau of Case Assignment & Initial Notice  
401 E. State Street  
P.O. Box 435, 5th Floor  
Trenton, NJ 08625

RE: Former Cardinal Health 406, LLC facility 14 Schoolhouse Road  
Somerset, NJ 088873  
ISRA Case # E20070038

Ms. Huang,

Cardinal Health, Inc., hereby requests a no further action for the above referenced case. Attached is the Negative Declaration Affidavit and a check in the amount of \$150.00, as required by NJDEP.

Please contact me at 614-757-7886, if you have questions regarding this request. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "H. James Cline".

H. James Cline  
Director, Environmental Affairs  
Cardinal Health, Inc.

7000 Cardinal Place  
Dublin, OH 43017

JUL 23 2008

ATTACHMENT M

RECEIVED SEP 25 2008



**State of New Jersey**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**JON S. CORZINE**  
*Governor*

**Bur. of Case Assignment & Initial Notice**  
401 East State Street  
P.O. Box 435  
Trenton, NJ 08625-0435  
Phone #: 609-633-1464  
Fax #: 609-633-1439

**LISA P. JACKSON**  
*Commissioner*

Mr. H. James Cline  
Cardinal Health Inc  
7000 Cardinal Place  
Dublin, OH 43017

**SEP 09 2008**

**Re: No Further Action Letter and Covenant Not to Sue**  
Remedial Action Type: Unrestricted Use for the Entire Site  
Case Name: Cardinal Health 406, LLC  
Location: 14 Schoolhouse Road, Franklin Township, Somerset County  
Block: 514 Lot: 20.04  
Program Interest #: 014287, Activity Number: ISR070002  
Document Title: E20070038  
ISRA Transaction: Sale of Property/Business  
Negative Declaration Affidavit Dated: June 26, 2008

Dear Mr. Cline:

Pursuant to N.J.S.A. 58:10B-13.1 and N.J.A.C. 7:26C, the New Jersey Department of Environmental Protection (Department) issues this No Further Action Letter and Covenant Not to Sue for the remediation of the industrial establishment specifically referenced above so long as Cardinal Health 406, LLC did not withhold any information from the Department. This action is based upon information in the Department's case file and H. James Cline's final certified affidavit dated June 26, 2008. In issuing this No Further Action Letter and Covenant Not to Sue, the Department has relied upon the certified representations and information provided to the Department. To remain in compliance with the terms of this No Further Action Letter and to maintain the benefits of the Covenant Not to Sue, Cardinal Health 406, LLC as well as each subsequent owner, lessee and operator must comply with the conditions noted below.

By issuance of this No Further Action Letter, the Department acknowledges the completion of a Preliminary Assessment and Site Investigation pursuant to the Technical Requirements for Site Remediation (N.J.A.C. 7:26E) for the industrial establishment. The Department reserves its rights to require any person responsible for the contamination at the site to address Natural Resource Injuries.

**NO FURTHER ACTION CONDITIONS**

Pursuant to N.J.S.A. 58:10B-12o, Cardinal Health 406, LLC and any other person who was liable for the cleanup and removal costs, and remains liable pursuant to the Spill Act, shall inform the Department in writing within 14 calendar days whenever its name or address changes. Any notices submitted pursuant to this paragraph shall reference the above case numbers and shall be sent to: Bureau of Case Assignment & Initial Notice - Case Assignment Section, Enforcement and Assignment Element, P.O. Box 28, Trenton, N.J. 08625.

OCT - 7 2008

*M*

### COVENANT NOT TO SUE

The Department issues this Covenant Not to Sue (Covenant) pursuant to N.J.S.A. 58:10B-13.1. That statute requires a Covenant not to sue with each no further action letter. However, in accordance with N.J.S.A. 58:10B-13.1, nothing in this Covenant shall benefit any person who is liable, pursuant to the Spill Compensation and Control Act (Spill Act), N.J.S.A. 58:10-23.11, for cleanup and removal costs and the Department makes no representation by the issuance of this Covenant, either express or implied, as to the Spill Act liability of any person.

The Department covenants, except as provided in the preceding paragraph, that it will not bring any civil action against:

- (a) the person who undertook the remediation;
- (b) subsequent owners of the subject property;
- (c) subsequent lessees of the subject property; and
- (d) subsequent operators at the subject property;

for the purposes of requiring remediation to address contamination which existed prior to the date of H. James Cline's final certified affidavit dated June 26, 2008 for the real property at the industrial establishment identified above, payment of compensation for damages to, or loss of, natural resources, for the restoration of natural resources in connection with the discharge on the property, or payment of cleanup and removal costs for such additional remediation.

Pursuant to N.J.S.A. 58:10B-13.1d, this Covenant does not relieve any person from the obligation to comply in the future with laws and regulations. The Department reserves its right to take all appropriate enforcement for any failure to do so.

The Department may revoke this Covenant at any time after providing notice upon its determination that any person with the legal obligation to comply with any condition in this No Further Action Letter has failed to do so;

This Covenant, which the Department has executed in duplicate, shall take effect immediately once the person who undertook the remediation has signed and dated the Covenant in the lines supplied below and the Department has received one copy of this document bearing original signatures of the Department and the person who undertook the remediation.

By (Print):

FRANCIS J. MACIELAK JR.

Signature:

Francis J. Macielak Jr.

Title:

VP EH&S

Dated:

9/26/08



NEW JERSEY DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

By: Kirstin Hahn, Chief  
Bureau of Case Assignment & Initial Notice

Signature: Kirstin Hahn

Dated: 9/9/08

NOTICES

**Building Interiors Not Addressed**

Please be advised that the remediation that is covered by this No Further Action Letter does not address the remediation of hazardous substances that may exist in building interiors or equipment; including, but not limited to, radon, asbestos and lead. As a result, any risks to human health presented by any building interior or equipment remains. A complete building interior evaluation should be completed before any change in use or re-occupancy is considered.

**Remediation Agreement**

By issuance of this no further action letter the Department acknowledges Cardinal Health 406, LLC has fully satisfied the terms of the Remediation Agreement and the Remediation Agreement is terminated. Cardinal Health 406, LLC does not need to continue to maintain a remediation-funding source or pay the annual 1% surcharge. This notice serves to release the Self Guarantee posted by Cardinal Health, Inc.

This no further action letter does not relieve Cardinal Health 406, LLC from the obligation to conduct future investigation or remediation activities pursuant to Federal, State or local laws for matters not addressed by this approval.

Thank you for your attention to these matters. If you have any questions, please contact Case Manager Pei Huang at (609) 292-3246.

Sincerely,

Kirstin Hahn

Kirstin Hahn, Chief  
Bureau of Case Assignment & Initial Notice

- c: Somerset County, Regional Health Department  
Remediation Agreement, Tina Layre  
Case Manager, Pei Huang  
Ms. Christine Wagner, URS Corporation, 12 Commerce Drive, Cranford, NJ 07016



**Cardinal Health, Inc.**  
7000 Cardinal Place  
Dublin, OH 43017

September 26, 2008

Ms. Kirstin Hahn  
Chief  
Bureau of Case Assignment & Initial Notice  
401 E. State Street  
P.O. Box 435, 5th Floor  
Trenton, NJ 08625-0435

RE:           Former Cardinal Health 406, LLC facility 14 Schoolhouse Road  
              Somerset, NJ 088873  
              ISRA Case # E20070038

Ms. Hahn,

As requested Cardinal Health, Inc., has signed in duplicate, the No Further Action/Covenant Not To Sue for the remediation of the above referenced industrial establishment, enclosed please find a signed original. Additionally, for your records the General Information Notice from 2007 was signed by Mr. Charles Echols Vice President of Corporate EH&S. Mr. Echols is no longer with Cardinal Health, Inc. Mr. Francis J. Macielak, Vice President of Corporate EH&S has signed the enclosed document.

Please contact me at 614-757-7886, if you have questions. Thank you for your assistance.

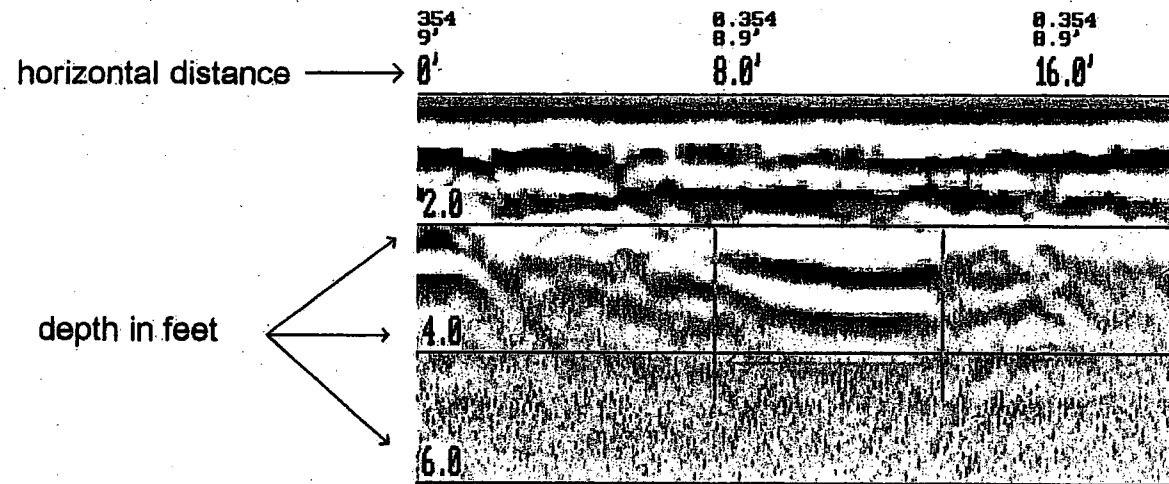
Sincerely,

A handwritten signature in black ink, appearing to read "H. James Cline".

H. James Cline  
Director, Environmental Affairs  
Cardinal Health, Inc.

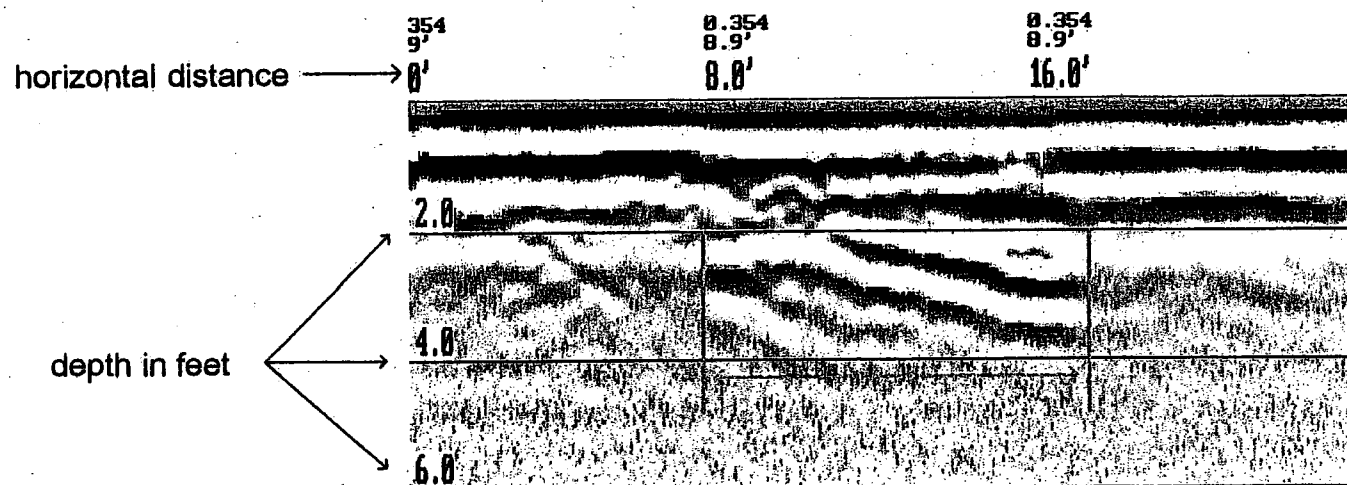
7000 Cardinal Place  
Dublin, OH 43017

Figure 2. GPR Profile A  
 Collected from South to North across short axis.  
 See Figure 1.



Blue lines highlight GPR anomaly. A relatively flat reflection, approximately 2.5-3' deep.

Figure 3. GPR Profile B  
 Collected from East to West across long axis. See Figure 1.



Blue lines highlight GPR anomaly. A relatively flat reflection, approximately 2.5-3' deep.

# URS CORPORATION

## Soil Boring Log

SEE FIGURE 3							Job No.: 11130076		Client: Cardinal Health, Inc.		Location: Franklin Township, NJ	
							Logged By: Nicole Reese		Boring No.: SB-2B-1			
							Driller: S. Crawford/EPI		Sheet: 1 of 1			
							Drilling Method: Geoprobe		Drilling Start Time      Finish Time			
							Sampling Method: Split Spoon with acetate liner					
							Water Level: Not encountered		945      1000			
							Depth of Screen: NA		Date      Date			
							Depth of Gravel: NA		7/6/2007      7/6/2007			
Depth of Bentonite: NA												

Sampler Type	Sample No. / Depth	Inches Driv. / Recov.	Blow Count / 6"	PID (ppm)	Analytical Sample	Depth (ft.)	Soil Graph	Surface Conditions
MC		48		0				Grass
		48		0		1		Reddish brown silt, trace clay, dry (0-0.5')
				0		2		Reddish brown fine sand, with silt, dense, dry (0.5-4.0')
				0		3		
				0		4		
				0		5		Refusal at 4-feet bgs
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
					20			

# URS CORPORATION

## Soil Boring Log

SEE FIGURE 3							Location of Boring		Job No.: 11130076		Client: Cardinal Health, Inc.		Location: Franklin Township, NJ	
							Logged By:		Nicole Reese		Boring No.: SB-2B-2			
							Driller:		S. Crawford/EPI		Sheet: 1 of 1			
							Drilling Method:		Geoprobe		Drilling			
							Sampling Method:		Split Spoon with acetate liner		Start Time		Finish Time	
							Water Level:		Not encountered		1005		1015	
							Depth of Screen:		NA		Date		Date	
							Depth of Gravel:		NA		7/6/2007		7/6/2007	
Depth of Bentonite:		NA												

Sampler Type	Sample No. / Depth	Inches Driv. / Recov.	Blow Count / 6"	PID (ppm)	Analytical Sample	Depth (ft.)	Soil Graph	Surface Conditions
MC		48		0				Grass
		48		0		1		Reddish brown silt, trace clay, dry (0-0.5')
				0		2		Reddish brown fine sand, with silt, dense, dry (0.5-3.0')
				0		3		
				0		4		Refusal at 3-feet bgs
				0		5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

**ATTACHMENT N**

SECTION V - INVENTORY OF TREATMENT PLANTS AND DRINKING WATER SOURCES



## SECTION IV – DESCRIPTION OF WATER SYSTEM

NJ American Water Company - Elizabethtown Division  
PWID # 2004002

600 South Avenue  
Westfield, NJ 07090  
(908)654-1234

NJ American Water Company - Elizabethtown Division is a public community water system consisting of

### 49 Entry Points to the Distribution System (EPTDS)

- 129 wells
- 0 wells under the influence of surface water
- 7 surface water intake(s)
- 1 purchased ground water
- 6 purchased surface water

Table 6 below contains the municipalities and the population within each of these municipalities served by NJ American Water Company - Elizabethtown Division.

**Table 6: Municipalities and Population Served**

<b>Municipality</b>	<b>County</b>	<b>Population Served - 2003</b>
Raritan Twp.	Hunterdon	10110
Readington Twp.	Hunterdon	3429
Tewksbury Twp.	Hunterdon	399
Hopewell Twp.	Mercer	57
Lawrence Twp.	Mercer	8022
Princeton Boro	Mercer	7176
Princeton Twp.	Mercer	16062
West Windsor Twp.	Mercer	20505
Cranbury Twp.	Middlesex	2805
Dunellen Boro	Middlesex	6717
Edison Twp.	Middlesex	4332
Middlesex Boro	Middlesex	13731
Piscataway Twp.	Middlesex	36633
Plainsboro Twp.	Middlesex	11775
South Brunswick Twp.	Middlesex	810
South Plainfield Boro	Middlesex	13365
Chester Boro	Morris	84
Bedminster Twp.	Somerset	231
Bound Brook Boro	Somerset	8574
Branchburg Twp.	Somerset	10338
Bridgewater Twp.	Somerset	36456
Franklin Twp.	Somerset	726
Green Brook Twp.	Somerset	6795
Hillsborough Twp.	Somerset	27666
Manville Boro	Somerset	11331
Millstone Boro	Somerset	255
Montgomery Twp.	Somerset	13515

<b>Municipality</b>	<b>County</b>	<b>Population Served - 2003</b>
North Plainfield Boro	Somerset	15120
Peapack-Gladstone	Somerset	2385
Raritan Boro	Somerset	6906
So. Bound Brook Boro	Somerset	3702
Somerville Boro	Somerset	10512
Warren Twp.	Somerset	10755
Watchung Boro	Somerset	4497
Clark Twp.	Union	15108
Cranford Twp.	Union	23193
Fanwood Boro	Union	7740
Garwood Boro	Union	4668
Hillside Twp.	Union	18192
Kenilworth Boro	Union	9399
Linden City	Union	35361
Mountainside Boro	Union	7680
Plainfield City	Union	31371
Roselle Boro	Union	16224
Roselle Park Boro	Union	10473
Scotch Plains Twp.	Union	22782
Union Twp.	Union	51576
Westfield Town	Union	29898

SECTION V - INVENTORY OF TREATMENT PLANTS AND DRINKING WATER SOURCES

SECTION V - SYSTEM INVENTORY FOR: NJ American Water Company - Elizabethtown Division

Table 7 provides the NJ American Water Company - Elizabethtown Division's treatment plant(s); source(s); the sources' location(s); whether the source(s) are ground water, surface water, or a purchased supply; and the sources' capacity(s). The first column contains the EPTDS ID and sources contributing to the same EPTDS are identified by the same number. An EPTDS is the entry point to the distribution system, and for most community water systems this location is after the water is treated at a treatment plant.

In the case of a ground water source, the well's confinement status and well permit number are provided.

Table 7: Drinking Water Source and EPTDS Inventory

EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
01	001	MT STA COMP DEL	T	P				
01	002	WELL 1/FIELD LANE	G	P	Brunswick aquifer	0.432	45-44720	U
01	003	WELL 2/FIELD LANE	G	P	Brunswick aquifer	0.2016	45-44719	U
01	004	WELL 3/FIELD LANE	G	W		0	45-44718	U
02	005	ELKS WELL	T	Y				
02	006	ELKS WELL/2327 FEATHERBED LANE	G	Y	glacial sand and gravel	0.4147	26-04751	U
03	007	GREENBROOK PLANT - JEFFERSON A	T	P				
03	008	GB WELL 1/WASHINGTON AVE	G	P	Brunswick aquifer	0.2952	45-00023	U
03	009	ROCK AVENUE WELL/115 ROCK AVE.	G	P	Brunswick aquifer	0.2707	25-12665	U
03	010	GB WELL 11/WASHINGTON AVE.	G	P	Brunswick aquifer	0.3917	25-02717	U
03	011	GB WELL 2/WASHINGTON AVE.	G	P	Brunswick aquifer	0.694	45-00024	U
03	012	GB WELL 3/WASHINGTON AVE.	G	P	Brunswick aquifer	0.1296	45-00025	U
03	013	GB WELL 4/WASHINGTON AVE	G	P	Brunswick aquifer	0.504	45-00026	U
03	014	GB WELL 5/WASHINGTON AVE.	G	P	Brunswick aquifer	0.3542	25-00572	U
03	015	GB WELL6/WASHINGTON AVE.	G	P	Brunswick aquifer	0.4593	25-00632	U
03	016	GB WELL7/WASHINGTON AVE.	G	P	Brunswick aquifer	0.3053	25-00633	U
03	017	GB WELL 8/WASHINGTON AVE.	G	P	Brunswick aquifer	0.3672	25-02715	U

EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
03	018	GB WELL9/WASHINGTON AVE.	G	P	Brunswick aquifer	0.5011	25-02716	U
04	020	QUINTON AVE WELL/KENILWORTH	T	P				
04	021	QUINTON AVE. WELL/660 QUINTON	G	P	Brunswick aquifer	0.2851	46-00014	U
05	022	RICHFIELD AVE WELL	T	U				
05	023	RICHFIELD AVE. WELL/654 RICHFI	G	P	Brunswick aquifer	0.2361	46-00015	U
06	024	SEBRINGS MILLS WELL FIELD	T	Y				
06	025	SM WELL 4/110SEBRINGS MILL	G	W	Brunswick aquifer	0.1728	25-11582	U
06	026	SM WELL 6	G	W	Brunswick aquifer	0.2304	45-00043	U
06	027	SM WELL 7	G	W	Brunswick aquifer	0.1728	25-11367	U
06	028	SM WELL 8	G	W	Brunswick aquifer	0.1728	25-13397	U
07	029	PAPEN ROAD WELL PLANT	T	P				
07	030	PAPEN ROAD WELL	G	P	Brunswick aquifer	0.2779	25-13435	U
08	223	WELLS ROAD PLANT	T	P				
09	031	CHARLES ST COMP DEL	T	P				
09	032	BRISTOL RD. WELL/211 SHEFFIELD	G	P	Brunswick aquifer	0.1901	25-09206	U
09	033	CHAS. ST. WELL1/1021 CHARLES S	G	P	Brunswick aquifer	0.527	25-00872	U
09	034	CHARLES ST. WELL 2/1051 CHARLE	G	P	Brunswick aquifer	0.1685	45-00004	U
10	036	CENTRAL AVE. WELL/269 CENTRAL	G	W	- Brunswick aquifer	0.2736	25-09083	U
11	298	CRANBURY #1A/MAPLEWOOD AVE.	G	P	middle Potomac-Raritan-Magothy aquifer	0.1728	28-07800	U
11	299	CRANBURY #2/MAPLEWOOD AVE.	G	W	upper Potomac-Raritan-Magothy aquifer	0.0576	48-00064	U
11	300	CRANBURY #3/MAPLEWOOD AVE.	G	P	middle Potomac-Raritan-Magothy aquifer	0.576	28-04559	U
11	305	MAPLEWOOD AVE. - CRANBURY PLAN	T	Y				
12	039	BOARD OF ED WELL	T	Y				
12	040	BOARD OF ED WELL/PARKVIEW AVE	G	W	Brunswick aquifer	0.3672	45-00022	U
13	041	ROCKVIEW AVE WELL	T	Y				
13	042	ROCKVIEW AVE WELL	G	W	Brunswick aquifer	0.1728	25-13898	U
14	043	ROCKVIEW TERR WELL	T	Y				

EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
14	044	ROCKVIEW TERR WELL	G	W	Brunswick aquifer	0.288	25-13106	U
15	045	MONTGOMERY TWP./RT 206/SUNSET	T	P				
15	046	MONTGOMERY TWP WELL 2/BRIDGEPO	G	P	Brunswick aquifer	0.2563	28-05511	U
16	061	ROCK AVENUE WELL/PISCATAWAY	T	P				
16	062	ROCK AVE. WELL/PISCATAWAY	G	P	Brunswick aquifer	0.216	25-13248	U
17	047	NETHERWOOD PLANT	T	P				
17	048	NETHERWOOD WELL 1/1341 NORTH AV	G	P	Brunswick aquifer	0.2376	45-00009	U
17	049	NETHERWOOD WELL 10	G	P	Brunswick aquifer	0.455	45-00018	U
17	050	NETHERWOOD WELL 11	G	P	Brunswick aquifer	0.1958	45-00019	U
17	051	NETHERWOOD WELL 2	G	P	Brunswick aquifer	0.1296	45-00010	U
17	052	NETHERWOOD WELL 3	G	P	Brunswick aquifer	0.2721	45-00011	U
17	053	NETHERWOOD WELL 4	G	P	Brunswick aquifer	0.3945	45-00012	U
17	055	NETHERWOOD WELL 5	G	P	Brunswick aquifer	0.2145	45-00013	U
17	056	NETHERWOOD WELL 6	G	P	Brunswick aquifer	0.3053	45-00014	U
17	057	NETHERWOOD WELL 7	G	P	Brunswick aquifer	0.504	45-00015	U
17	058	NETHERWOOD WELL 8	G	P	Brunswick aquifer	0.2966	45-00016	U
17	059	NETHERWOOD WELL 9	G	P	Brunswick aquifer	0.4392	45-00017	U
17	060	GEORGE ST. WELL	G	P	Brunswick aquifer	0.1296	45-00021	U
17	328	NETHERWOOD 12	G	P	Brunswick aquifer	0.4334	45-00020	U
18	063	CITY OF PLAINFIELD WELL	T	Y				
18	064	CITY OF PLAINFIELD WELL	G	W	Brunswick aquifer	0.9417	45-00027	U
19	065	FIFTH ST WELL	T	S				
19	066	FIFTH ST WELL	G	W	Brunswick aquifer	0.2779	25-12961	U
20	067	PROSPECT AVE WELL	T	P				
20	068	PROSPECT AVE WELL	G	P	Brunswick aquifer	0.2016	25-09037	U
21	069	WATCHUNG AVE WELL	T	Y				
21	070	WATCHUNG AVE, WELL/1656 WATCHU	G	W	Brunswick aquifer	0.4301	25-08185	U
22	071	PLAINSBORO WELL 1/DEER CREEK R	T	S				
22	072	PLAINSBORO WELL 1	G	P	middle Potomac-Raritan-Magothy aquifer	0.504	28-09278	U

EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
23	073	PLAINSBORO WELL2/JEFFERS WELL	T	Y				
23	074	PLAINSBORO WELL 2	G	P	Stockton Formation	0.3038	28-11477	U
25	077	STONY BROOK PLANT	T	P				
25	078	SB WELL 2/WEST DRIVE	G	P	Stockton Formation	0.504	48-00008	U
25	079	SB WELL 3 /WEST DRIVE	G	P	Stockton Formation	0.2304	48-00009	U
25	080	SB WELL 4/WEST DRIVE	G	P	Stockton Formation	0.1728	48-00010	U
25	081	SB WELL 6/WEST DRIVE	G	P	Stockton Formation	0.2592	48-00011	U
25	082	SB WELL 7A/WEST DRIVE	G	P	Stockton Formation	0.8639	28-20986	U
25	083	SB WELL 8/WEST DRIVE	G	P	Stockton Formation	0.3231	48-00013	U
28	088	HARRISON ST. PLANT	T	Y				
28	089	HARRISON ST WELL 1	G	W	Stockton Formation	0.0668	48-00005	U
28	090	HARRISON ST. WELL 3	G	Y	Brunswick aquifer	0.0636	28-04371	U
28	091	HARRISON ST WELL 4	G	W	Stockton Formation	0.1068	48-00006	U
28	092	HARRISON ST WELL 5	G	W	Stockton Formation	0.1596	48-00007	U
28	093	HARRISON ST WELL 6	G	W	Stockton Formation	0.3211	28-01886	U
28	094	HARRISON ST WELL 7	G	W	Stockton Formation	0.288	28-04999	U
28	095	HARRISON ST. WELL 8	G	Y	Stockton Formation	0.2304	28-05073	U
30	097	ST WALBURGA WELL 1	T	Y				
30	098	ST WALBRUGA WELL 1/PINE ST & R	G	W	Brunswick aquifer	0.504	26-02302	U
31	099	ST WALBURGA WELL 2	T	Y				
31	100	ST WALBRUGA WELL 2/WHEATSHEAF	G	W	Brunswick aquifer	0.288	26-02360	U
32	101	ST WALBURGA WELL 3	T	Y				
32	102	ST WALBRUGA WELL 3/PINE ST & 9	G	W	Brunswick aquifer	0.5184	26-02412	U
33	103	ST WALBURGA WELL 4	T	Y				
33	104	ST WALBURGA WELL 4 /940 WHEATS	G	W	Brunswick aquifer	0.648	26-02463	U
34	105	CHANDLER AVE WELL	T	Y				
34	106	CHANDLER AVE WELL	G	W	Brunswick aquifer	0.432	26-02393	U
35	107	FIRST AVE WELL	T	Y				
35	108	FIRST AVE WELL	G	W	Brunswick aquifer	0.648	26-01696	U
36	109	ABERDEEN RD WELL	T	P				

EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
36	110	ABERDEEN RD WELL	G	P	Brunswick aquifer	0.5616	25-12631	U
37	111	GLENSIDE AVE WELL	T	U				
37	112	GLENSIDE AVE WELL	G	P	Brunswick aquifer	0.2448	25-07173	U
38	113	JERUSALEM ROAD PLANT	T	P				
38	114	JERUSALEM RD WELL 1	G	P	Brunswick aquifer	0.2865	25-00130	U
38	115	JERUSALEM RD WELL 3	G	P	Brunswick aquifer	0.1152	25-00800	U
38	116	JERUSALM RD WELL 2	G	P	Brunswick aquifer	0.2145	25-00649	U
39	117	MORSE AVE WELL	T	W				
39	118	MORSE AVE WELL/PLAINFIELD & MOR	G	W	Brunswick aquifer	0.1728	25-09281	U
40	119	MAPLE GLEN	T	P				
40	120	MAPLE GLEN WELL/NORTH MAIN ST.	G	P	Brunswick aquifer	0.144	24-07896	U
41	121	CLINTON AVE WELL	T	P				
41	122	CLINTON AVE WELL	G	P	Brunswick aquifer	0.5285	25-13354	U
42	123	EIGHTH ST WELL	T	P				
42	124	EIGHTH ST WELL	G	P	Brunswick aquifer	0.3456	25-12632	U
43	125	SPRINGFIELD PLANT	T	Y				
43	126	SF WELL 23	G	W		0.072	46-41807	U
43	127	SF WELL 7	G	W	Brunswick aquifer	0.144	46-00044	U
43	128	SF WELL 11	G	W	Brunswick aquifer	0.288	46-00048	U
43	129	SF WELL 12R	G	W	Brunswick aquifer	0.144	46-00049	U
43	131	SF WELL 2A	G	W	Brunswick aquifer	0.36	46-00041	U
43	132	SF WELL 21R	G	W	Brunswick aquifer	0.288	46-00050	U
43	133	SF WELL 29	G	W		0.144	46-41809	U
43	134	SF WELL 17	G	W		0	46-41806	U
43	135	SF WELL 32	G	W		0.144	46-41810	U
43	136	SF WELL 36	G	W	Brunswick aquifer	0.144	46-00052	U
43	137	SF WELL 43	G	W		0	46-41805	U
43	138	SF WELL 41	G	W		0.288	46-41811	U
43	139	SF WELL 42	G	W	Brunswick aquifer	0.18	46-00053	U
43	140	SF WELL 44	G	W		0.216	46-41812	U
43	141	SF WELL 47	G	W	Brunswick aquifer	0.18	46-00054	U



EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
43	142	SF WELL 48	G	W	Brunswick aquifer	0.144	46-00055	U
43	143	SF WELL 25	G	W		0.144	46-41808	U
43	144	SF WELL 5A	G	W	Brunswick aquifer	0.216	46-00042	U
43	145	SF WELL 24	G	W	Brunswick aquifer	0.144	46-00051	U
43	146	SF WELL 53	G	W	Brunswick aquifer	0.144	46-00057	U
43	147	SF WELL 54	G	W	Brunswick aquifer	0.36	46-00058	U
43	148	SF WELL 55	G	W	Brunswick aquifer	0.72	46-00059	U
43	150	SF WELL 8R	G	W	Brunswick aquifer	0.216	46-00046	U
43	151	SF WELL 9R	G	W	Brunswick aquifer	0.288	46-00047	U
43	152	SPRINGFIELD WELL 1	G	W	Brunswick aquifer	0.144	46-00039	U
43	153	SPRINGFIELD WELL 1A	G	W	Brunswick aquifer	0.36	46-00040	U
43	154	WELL 6A	G	W	Brunswick aquifer	0.432	46-00043	U
43	326	SPRINGFIELD 2L	G	W		0	26-04081	U
43	327	SPRINGFIELD 6L	G	W	Brunswick aquifer	0.288	26-04083	U
43	334	SF WELL 52	G	W		0	46-41813	U
44	156	POTTERSVILLE WELL	T	Y				
44	157	POTTERSVILLE WELL/HOMESTEAD RD	G	P	igneous and metamorphic rocks	0.0763	25-15051	U
45	158	HUMMOCKS STATION PLANT	T	P				
45	159	HUM WELL H2	G	P	glacial sand and gravel	0.1181	26-04830	U
45	160	HUM WELL 17	G	P	glacial sand and gravel	0.1541	46-00032	U
45	161	HUM WELL 4A	G	P	glacial sand and gravel	0.2448	46-00021	U
45	162	HUM WELL 6AR	G	P	glacial sand and gravel	0.432	46-00024	U
45	163	HUM WELL 7A	G	P	Brunswick aquifer	0.216	46-00025	U
45	164	HUM WELL 8A	G	P	glacial sand and gravel	0.36	46-00026	U
45	165	HUM WELL 5A	G	P	glacial sand and gravel	0.216	46-00023	U
45	166	HUMMOCKS RANNEY WELL 1/MORRIS	G	P	glacial sand and gravel	1.4399	26-12730	U
47	189	MONTGOMERY TWP WELL 1	T	S				
47	190	MONT. TWP WELL 1/ RUTLAND RD	G	P	Brunswick aquifer	0.2664	28-05407	U
49	193	ELM ST WELL	T	Y				
49	194	ELM ST WELL	G	W	Brunswick aquifer	0.504	25-08087	U

EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
50	195	PROSPECT ST WELL	T	Y				
50	196	PROSPECT ST WELL	G	W	Brunswick aquifer	0.2304	25-12960	U
51	197	WESTFIELD OFFICE #1	T	Z				
53	200	WITTKE PLANT	T	Y				
53	201	WITTKE WELL 1	G	W	Brunswick aquifer	0.2448	25-04639	U
53	202	WITTKE WELL 2	G	W	Brunswick aquifer	0.7487	25-05083	U
55	203	JEFFERSON PARK PLANT	T	U				
55	204	JEFFERSON PARK WELL 1	G	P	middle Potomac-Raritan-Magothy aquifer	0.7788	28-05368	U
55	205	JEFFERSON PARK WELL 2	G	P	middle Potomac-Raritan-Magothy aquifer	0.5866	28-06455	U
59	206	RARITAN-MILLSTONE WATER TREATM	T	P				
59	207	RARITAN RIVER	S	P	Raritan River	50	elizin4	
59	207	RARITAN RIVER	S	P	Raritan River	50	elizin2	
59	207	RARITAN RIVER	S	P	Raritan River	50	elizin1	
59	207	RARITAN RIVER	S	P	Raritan River	50	elizin3	
59	208	MILLSTONE RIVER	S	P	Millstone River	25	elizmill	
59	209	DELAWARE - RARITAN CANAL	S	P	Delaware & Raritan Canal	32	elizin5	
65	308	ELIZABETH WATER DEPARTMENT	P	P				
66	310	FLEMLINGTON WATER COMPANY	P	P				
67	312	FRANKLIN TWP.	P	P				
68	314	MONROE TWP.	P	P				
69	321	NEW JERSEY AMERICAN WATER CO.	P	P				
70	323	NEWARK WATER CO.	W	P				
71	325	SOUTH BRUNSWICK	P	P				
73	331	CANAL ROAD WTP	T	P				
73	332	RARITAN RIVER	S	P	Raritan River	40	elizonrd	
75	339	WELL C-1	G	P	Brunswick aquifer	0.1843	25-11880	U
75	340	WELL C-2	G	P	Brunswick aquifer	0.1857	25-12662	U
75	342	PLANT/DUKES PKWY & N 6TH AVE(M	T	P				

**\*KEY**

**Water System Component**

G = Ground Water, P = Purchased Surface Water, S = Surface Water, T = Treatment Plant (EPTDS), U = Ground Water Under The Direct Influence of Surface Water, W = Purchased Ground Water. For a complete definition of each source of drinking water, please refer to the Glossary at the end of this report.

**Confinement Status**

C = Confined, U = Unconfined. For a definition of a confined and an unconfined aquifer please refer to the Glossary at the end of this report. K = Unknown, S = Semi-confined. For the purposes of SWAP both K and S were treated as unconfined wells.

**Source Status**

C = Recharge, E = Emergency, I = Interim, O = Other, P = Permanent, R = Reserve, S = Seasonal, U = Not in Use/Capped, V = Abandoned/Not Capped, W = Not in Use/Unspecified, X = Not in Use/Mechanical, Y = Not in Use/Contaminated. For a complete definition of each well status category, please refer to the Glossary at the end of this report.

**Source**

For ground water sources, the name of the aquifer is provided. For surface water sources, the name of the surface water body on which the intake is located is given.

The NJ American Water Company - Elizabethtown Division contains 49 EPTDS as illustrated in Table 7 (identified by a "T" in the water system component column). Often public water systems treat source water at the EPTDS to ensure the drinking water provided to the public meets Federal and State Drinking Water Standards. Please refer to Appendix A- Attachment 5 for information on the public water system's treatment process.

SECTION VI - SUSCEPTIBILITY RATINGS FOR YOUR DRINKING WATER SOURCE(S)

## SECTION VI – SUSCEPTIBILITY RATINGS FOR DRINKING WATER SOURCE(S)

Table 8 provides a summary of the susceptibility ratings for the system's source(s). The source column of the table provides the number of ground water and surface water sources and the number of ground water under the direct influence of surface water (GUDI) wells in the system. The other columns provide the total number of source(s) that rated high (H), medium (M), and low (L) for each of the contaminant categories.

**Table 8: Summary of Susceptibility Ratings for Drinking Water Source(s)**

Sources	Pathogens			Nutrients			Pesticides			VOCs			Inorganics			Radionuclides			Radon			DBPs		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 129	4	65	29	42	56			24	74	88		10	16	66	16	39	59		92	6		25	73	
GUDI - 0																								
Surface water intakes - 7	7			7			7			7			7					7			7	7		

To review a summary of how the other public water systems in the State of New Jersey rated, please refer to Table 5, "Summary of Statewide Susceptibility Ratings for Community Water System Sources (Percent %)" in Section III of the Source Water Assessment Report.

**If a drinking water source's susceptibility is high, it does not necessarily mean the water is contaminated.** High susceptibility is a vulnerability rating, not a factor determining whether or not the water is or is not meeting State and Federal Safe Drinking Water Standards. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. Please refer to the Consumer Confidence Report (CCR) to determine if the drinking water is meeting all of the Safe Drinking Water Act regulatory requirements.

Table 9 illustrates the susceptibility rating for each individual source for each of the contaminant categories.

**Table 9: Susceptibility Rating for Drinking Water Source(s)**

EPTDS ID	Source ID	Source Name	Contaminant Category							
			Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
			Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating
01	002	WELL 1/FIELD LANE	M	M	L	H	M	M	H	M
01	003	WELL 2/FIELD LANE	M	M	L	H	M	M	H	M
01	004	WELL 3/FIELD LANE								
02	006	ELKS WELL/2327 FEATHERBED LANE	M	H	M	H	M	H	H	M
03	008	GB WELL 1/WASHINGTON AVE	M	M	L	H	M	M	H	H
03	009	ROCK AVENUE WELL/115 ROCK AVE.	M	M	L	H	H	M	H	H
03	010	GB WELL 11/WASHINGTON AVE.	M	M	L	H	H	M	H	H
03	011	GB WELL 2/WASHINGTON AVE.	M	H	L	H	M	M	H	H
03	012	GB WELL 3/WASHINGTON AVE.	M	M	L	H	M	M	H	M
03	013	GB WELL 4/WASHINGTON AVE	M	M	L	H	H	M	H	H
03	014	GB WELL 5/WASHINGTON AVE.	M	M	L	H	L	M	H	H
03	015	GB WELL6/WASHINGTON AVE.	M	M	L	H	L	M	H	H
03	016	GB WELL7/WASHINGTON AVE.	M	M	L	H	L	M	H	H
03	017	GB WELL 8/WASHINGTON AVE.	M	M	L	H	L	M	H	H
03	018	GB WELL9/WASHINGTON AVE.	M	M	L	H	M	M	H	H
04	021	QUINTON AVE. WELL/660 QUINTON	L	M	L	H	H	M	H	M
05	023	RICHFIELD AVE. WELL/654 RICHFI	L	M	L	H	M	M	H	M
06	025	SM WELL 4/110SEBRINGS MILL	M	H	L	H	M	M	H	H
06	026	SM WELL 6	M	H	M	H	M	M	H	H
06	027	SM WELL 7	M	H	L	H	M	M	H	M
06	028	SM WELL 8	M	M	L	H	H	M	H	H
07	030	PAPEN ROAD WELL	M	H	L	L	L	M	H	M
09	032	BRISTOL RD. WELL/211 SHEFFIELD	M	M	L	H	M	H	H	M
09	033	CHAS. ST. WELL1/1021 CHARLES S	M	M	L	H	M	M	H	M
09	034	CHARLES ST. WELL 2/1051 CHARLE	L	M	L	H	L	M	H	M
10	036	CENTRAL AVE. WELL/269 CENTRAL	M	M	L	H	H	H	H	M
11	298	CRANBURY #1A/MAPLEWOOD AVE.	L	H	M	H	M	H	M	M
11	299	CRANBURY #2/MAPLEWOOD AVE.	L	H	M	H	M	H	M	M
11	300	CRANBURY #3/MAPLEWOOD AVE.	L	H	M	H	M	H	M	M
12	040	BOARD OF ED WELL/PARKVIEW AVE	M	H	L	H	H	M	H	H

EPTDS ID	Source ID	Source Name	Contaminant Category							
			Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
			Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating
13	042	ROCKVIEW AVE WELL	M	H	L	H	M	M	H	M
14	044	ROCKVIEW TERR WELL	H	H	M	H	M	H	H	M
15	046	MONTGOMERY TWP WELL 2/BRIDGEPO	M	H	M	L	M	M	H	H
16	062	ROCK AVE. WELL/PISCATAWAY	M	M	L	H	M	M	H	M
17	048	NETHERWOOD WELL 1/1341 NORTH AV	L	M	L	H	M	H	H	M
17	049	NETHERWOOD WELL 10	L	M	L	H	M	H	H	M
17	050	NETHERWOOD WELL 11	L	M	L	H	M	H	H	M
17	051	NETHERWOOD WELL 2	L	M	L	H	M	H	H	M
17	052	NETHERWOOD WELL 3	L	M	L	H	M	H	H	M
17	053	NETHERWOOD WELL 4	L	M	L	H	M	H	H	M
17	055	NETHERWOOD WELL 5	L	M	L	H	M	H	H	M
17	056	NETHERWOOD WELL 6	L	M	L	H	M	H	H	M
17	057	NETHERWOOD WELL 7	L	M	L	H	M	H	H	M
17	058	NETHERWOOD WELL 8	L	M	L	H	M	H	H	M
17	059	NETHERWOOD WELL 9	L	M	L	H	M	H	H	M
17	060	GEORGE ST. WELL	L	M	L	H	H	H	H	M
17	328	NETHERWOOD 12	L	M	L	H	M	H	H	M
18	064	CITY OF PLAINFIELD WELL	M	H	M	H	M	M	H	H
19	066	FIFTH ST WELL	L	M	L	H	M	H	H	M
20	068	PROSPECT AVE WELL	L	M	L	H	L	M	H	M
21	070	WATCHUNG AVE, WELL/1656 WATCHU	L	M	L	H	L	H	H	M
22	072	PLAINSBORO WELL 1	M	H	M	H	M	H	M	M
23	074	PLAINSBORO WELL 2	M	H	M	H	M	H	H	H
25	078	SB WELL 2/WEST DRIVE	M	H	M	H	L	M	H	H
25	079	SB WELL 3 /WEST DRIVE	M	H	L	H	M	M	H	M
25	080	SB WELL 4/WEST DRIVE	M	H	L	H	L	M	H	M
25	081	SB WELL 6/WEST DRIVE	M	H	L	H	L	M	H	M
25	082	SB WELL 7A/WEST DRIVE	M	H	M	H	L	M	H	H
25	083	SB WELL 8/WEST DRIVE	M	H	L	H	M	M	H	M
28	089	HARRISON ST WELL 1	M	H	M	L	M	M	H	M
28	090	HARRISON ST. WELL 3	M	H	M	H	H	H	H	H
28	091	HARRISON ST WELL 4	M	H	M	H	M	H	H	M
28	092	HARRISON ST WELL 5	M	H	M	H	M	H	H	M
28	093	HARRISON ST WELL 6	M	H	M	H	H	H	H	M
28	094	HARRISON ST WELL 7	M	H	L	H	M	M	H	M
28	095	HARRISON ST. WELL 8	M	H	L	H	M	M	H	M
30	098	ST WALBRUGA WELL 1/PINE ST & R	M	M	L	H	H	H	H	M

EPTDS ID	Source ID	Source Name	Contaminant Category							
			Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
			Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating
31	100	ST WALBRUGA WELL 2/WHEATSHEAF	M	M	L	H	M	H	H	M
32	102	ST WALBRUGA WELL 3/PINE ST & 9	M	M	L	H	M	H	H	M
33	104	ST WALBURGA WELL 4 /940 WHEATS	M	M	L	H	M	H	H	M
34	106	CHANDLER AVE WELL	M	M	L	H	M	M	H	H
35	108	FIRST AVE WELL	M	M	L	H	M	H	H	M
36	110	ABERDEEN RD WELL	M	M	L	H	M	M	H	M
37	112	GLENSIDE AVE WELL	M	M	L	H	M	M	H	M
38	114	JERUSALEM RD WELL 1	L	M	L	H	M	M	H	M
38	115	JERUSALEM RD WELL 3	L	M	L	H	M	M	H	M
38	116	JERUSALM RD WELL 2	L	M	L	H	M	M	H	M
39	118	MORSE AVE WELL/PLAINFIELD & MOR	L	M	L	H	M	H	H	M
40	120	MAPLE GLEN WELL/NORTH MAIN ST.	M	H	L	H	M	M	H	M
41	122	CLINTON AVE WELL	M	M	L	H	M	H	H	M
42	124	EIGHTH ST WELL	M	M	L	H	H	H	H	M
43	126	SF WELL 23								
43	127	SF WELL 7								
43	128	SF WELL 11								
43	129	SF WELL 12R								
43	131	SF WELL 2A								
43	132	SF WELL 21R								
43	133	SF WELL 29								
43	134	SF WELL 17								
43	135	SF WELL 32								
43	136	SF WELL 36								
43	137	SF WELL 43								
43	138	SF WELL 41								
43	139	SF WELL 42								
43	140	SF WELL 44								
43	141	SF WELL 47								
43	142	SF WELL 48								
43	143	SF WELL 25								
43	144	SF WELL 5A								
43	145	SF WELL 24								
43	146	SF WELL 53								
43	147	SF WELL 54								
43	148	SF WELL 55								
43	150	SF WELL 8R								



EPTDS ID	Source ID	Source Name	Contaminant Category							
			Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
			Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating
43	151	SF WELL 9R								
43	152	SPRINGFIELD WELL 1								
43	153	SPRINGFIELD WELL 1A								
43	154	WELL 6A								
43	326	SPRINGFIELD 2L								
43	327	SPRINGFIELD 6L								
43	334	SF WELL 52								
44	157	POTTERSVILLE WELL/HOMESTEAD RD	H	M	M	L	L	M	H	M
45	159	HUM WELL H2	M	H	L	H	M	M	H	M
45	160	HUM WELL 17	L	H	L	L	M	M	H	M
45	161	HUM WELL 4A	M	H	L	L	M	M	H	M
45	162	HUM WELL 6AR	M	H	L	H	H	M	H	M
45	163	HUM WELL 7A	M	M	L	H	M	M	H	M
45	164	HUM WELL 8A	M	H	L	H	M	M	H	M
45	165	HUM WELL 5A	M	H	L	L	L	M	H	M
45	166	HUMMOCKS RANNEY WELL 1/MORRIS	M	H	M	H	M	M	H	H
47	190	MONT. TWP WELL 1/ RUTLAND RD	M	H	M	L	H	M	H	H
49	194	ELM ST WELL	L	M	L	H	M	H	H	M
50	196	PROSPECT ST WELL	L	M	L	H	L	M	H	M
53	201	WITTKE WELL 1	M	M	L	H	L	M	H	M
53	202	WITTKE WELL 2	M	M	L	H	M	M	H	M
55	204	JEFFERSON PARK WELL 1	M	H	M	L	M	H	M	M
55	205	JEFFERSON PARK WELL 2	M	H	M	L	M	H	M	M
59	207	RARITAN RIVER	H	H	H	M	H	L	L	H
59	207	RARITAN RIVER	H	H	H	M	H	L	L	H
59	207	RARITAN RIVER	H	H	H	M	H	L	L	H
59	207	RARITAN RIVER	H	H	H	M	H	L	L	H
59	208	MILLSTONE RIVER	H	H	H	M	H	L	L	H
59	209	DELAWARE - RARITAN CANAL	H	H	H	M	H	L	L	H
73	332	RARITAN RIVER	H	H	H	M	H	L	L	H
75	339	WELL C-1	H	H	M	H	H	M	H	H
75	340	WELL C-2	H	H	M	H	H	M	H	H

The potential contaminant source inventory and sensitivity variables were used to determine the susceptibility ratings for the sources. For specific information on the water system's potential contaminant source inventory and sensitivity variables, please refer to the Individual Explanatory Variable Inventory and the Specific Potential Contaminant Sources Inventory, Appendix A- Attachment 1 and 2.

**SECTION VII - SUSCEPTIBILITY RATINGS FOR YOUR ENTRY POINT TO THE  
DISTRIBUTION SYSTEM (EPTDS)**

## SECTION VII – SUSCEPTIBILITY RATINGS FOR ENTRY POINT TO THE DISTRIBUTION SYSTEM (EPTDS)

The NJ American Water Company - Elizabethtown Division contains 49 EPTDS. The EPTDS and the susceptibility rating for radon and each of the seven-contaminant categories are provided in Table 11. A susceptibility rating was developed for each EPTDS because this rating represents the water that is treated and delivered to the consumer. A majority of the monitoring regulations are established for the point at which the water exits the water treatment facility, therefore the EPTDS susceptibility rating is important in determining the monitoring requirements.

The EPTDS rating was calculated by the following method. The source contribution resulted from multiplying the pumping rate for each water source by each source's susceptibility score (a point value based on the contaminant category scoring system found in Appendix A – Attachment 3). In cases where the pumping rate was not available, the pumping capacity was used. Next, all source contributions were summed and divided by the total capacity (sum of all the pumping rates and/or capacities) for the EPTDS.

$$\frac{\sum \text{Source Contributions (Source Capacity x Source Susceptibility Score Rating)}}{\text{Total Capacity } (\sum \text{ of all source capacities to the EPTDS})} = \text{EPTDS Susceptibility Score}$$

Total Capacity ( $\sum$  of all source capacities to the EPTDS)

### Key

**Source Capacity:** the source capacity used for determining EPTDS ratings was the same as the pumping rate used by New Jersey Geological Survey to create the source water assessment areas. If the pumping rate was not available, the pumping capacity or a default value was used. The pumping rate selection is described in the New Jersey Geological Survey's "Guidance for Well Head Protection Area Delineations in New Jersey", Appendix B- Attachment 1.

**Source Contribution:** the value calculated by multiplying the source's pumping rate by the source's susceptibility score rating. The susceptibility score rating is the point value based on the contaminant category scoring system, which can be found in Appendix A – Attachment 3.

**Source Susceptibility Score Rating:** to obtain a high, medium, or low susceptibility rating, USGS developed a susceptibility scoring system for each contaminant category (pathogens, VOCs, inorganics, nutrients, radionuclides, disinfection byproduct precursors, and pesticides). Each contaminant category has its own point system based on the susceptibility model. For example a susceptibility score range for a contaminant could be 0-5 = low susceptibility, 6-10 = medium susceptibility, and 11-20 = high susceptibility. See Appendices A- Attachment 3 for the susceptibility scoring system USGS used to determine the susceptibility ratings.

**Total Capacity:** is the full amount of water the sources are contributing to the EPTDS. The pumping rates/capacities are summed to determine the total capacity for the EPTDS.

For groundwater sources, only permanent, seasonal, and interim wells were used in the EPTDS rating calculation. Other wells such as emergency, reserve, and not-in-use, were not included in the source to EPTDS "roll-up", but these wells were rated on a source basis.

For public water systems that consist of a combination of well(s) and intake(s), the EPTDS received a ground water EPTDS rating and a surface water EPTDS rating. Even in circumstances where the surface water is blended with ground water, the EPTDS received two separate susceptibility ratings. A separate ETPDS rating is provided for the ground water and the surface water because separate susceptibility models were developed for ground and surface water. Ground water and surface water susceptibility models differ in susceptibility rating score, therefore, the rating results are not on the same scale.

If a facility has only one well or intake contributing to the EPTDS, that EPTDS received the same rating as the well or intake. DEP used the equation below to determine an EPTDS susceptibility rating.

Table 10 provides an example of how the EPTDS ratings were calculated. To review how the EPTDS ratings were calculated for the NJ American Water Company - Elizabethtown Division, please refer to Appendix A- Attachment 4.

**Table 10: Example of an EPTDS Susceptibility Rating Calculation**  
EPTDS 01

Source	Capacity (MGD)	Source Susceptibility Score Rating (0-20, low to high)	Total = Source Contribution
Well 1	1.09	20	$(1.09 \times 20) = 21.8$
Well 2	1.72	10	17.2
Well 3	0.72	5	3.6
Well 4	1.48	10	14.8
Well 5	0.75	20	15.0
Total Capacity	5.76		72.4
EPTDS Susceptibility Score is $72.4 / 5.76 = 12.6$			

For the above example, the sum of the source contributions for EPTDS 01 (72.4) is divided by the total capacity from all sources (5.76) giving a susceptibility score for the EPTDS of 12.6. The original range for rating sources was 0-5 low, 6-10 medium, 11-20 high. EPTDS 01 susceptibility rating was 12.6; therefore the EPTDS would receive a high rating.

Table 11 lists the susceptibility ratings for each EPTDS for the NJ American Water Company - Elizabethtown Division.

**Table 11: Susceptibility Rating for EPTDS**

EPTDS ID	EPTDS Name	Contaminant Category							
		Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
		Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating
01	MT STA COMP DEL	M	M	L	H	M	M	H	M
03	GREENBROOK PLANT - JEFFERSON A	M	M	L	H	M	M	H	H
04	QUINTON AVE WELL/KENILWORTH	L	M	L	H	H	M	H	M
05	RICHFIELD AVE WELL	L	M	L	H	M	M	H	M
07	PAPEN ROAD WELL PLANT	M	H	L	L	L	M	H	M
09	CHARLES ST COMP DEL	L	M	L	H	M	M	H	M
11	MAPLEWOOD AVE. - CRANBURY PLAN	L	H	M	H	M	H	M	M
15	MONTGOMERY TWP./RT 206/SUNSET	M	H	M	L	M	M	H	H
16	ROCK AVENUE WELL/PISCATAWAY	M	M	L	H	M	M	H	M
17	NETHERWOOD PLANT	L	M	L	H	M	H	H	M
20	PROSPECT AVE WELL	L	M	L	H	L	M	H	M
22	PLAINSBORO WELL 1/DEER CREEK R	M	H	M	H	M	H	M	M
23	PLAINSBORO WELL2/JEFFERS WELL	M	H	M	H	M	H	H	H
25	STONY BROOK PLANT	M	H	M	H	L	M	H	H
36	ABERDEEN RD WELL	M	M	L	H	M	M	H	M
37	GLENSIDE AVE WELL	M	M	L	H	M	M	H	M
38	JERUSALEM ROAD PLANT	L	M	L	H	M	M	H	M
40	MAPLE GLEN	M	H	L	H	M	M	H	M
41	CLINTON AVE WELL	M	M	L	H	M	H	H	M
42	EIGHTH ST WELL	M	M	L	H	H	H	H	M
44	POTTERSVILLE WELL	H	M	M	L	L	M	H	M
45	HUMMOCKS STATION PLANT	M	H	L	H	M	M	H	M
47	MONTGOMERY TWP WELL 1	M	H	M	L	H	M	H	H
55	JEFFERSON PARK PLANT	M	H	M	L	M	H	M	M
59	RARITAN-MILLSTONE WATER TREATM	H	H	H	M	H	L	L	H
73	CANAL ROAD WTP	H	H	H	M	H	L	L	H
75	PLANT/DUKES PKWY & N 6TH AVE(M	H	H	M	H	H	M	H	H

Franklin Co  
LFW

SECTION IV - GENERAL DESCRIPTION OF YOUR WATER SYSTEM

## SECTION IV – DESCRIPTION OF WATER SYSTEM

Franklin Township Department of Public Works  
PWID # 1808001

40 Churchill Avenue  
Somerset, NJ 08873  
(732)249-7800

Franklin Township Department of Public Works is a public community water system consisting of

0 Entry Points to the Distribution System (EPTDS)

0 wells

0 wells under the influence of surface water

0 surface water intake(s)

0 purchased ground water

4 purchased surface water

Table 6 below contains the municipalities and the population within each of these municipalities served by Franklin Township Department of Public Works.

**Table 6: Municipalities and Population Served**

<b>Municipality</b>	<b>County</b>	<b>Population Served - 2003</b>
Franklin Twp.	Somerset	50000

**SECTION V - INVENTORY OF TREATMENT PLANTS AND DRINKING WATER SOURCES**



## SECTION V - SYSTEM INVENTORY FOR: Franklin Township Department of Public Works

Table 7 provides the Franklin Township Department of Public Works's treatment plant(s); source(s); the sources' location(s); whether the source(s) are ground water, surface water, or a purchased supply; and the sources' capacity(s). The first column contains the EPTDS ID and sources contributing to the same EPTDS are identified by the same number. An EPTDS is the entry point to the distribution system, and for most community water systems this location is after the water is treated at a treatment plant.

In the case of a ground water source, the well's confinement status and well permit number are provided.

**Table 7: Drinking Water Source and EPTDS Inventory**

EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
01	004	ELIZABETHTOWN WATER CO	P	P				
02	007	NORTH BRUNSWICK WATER DEPT	P	P				
03	009	SOUTH BRUNSWICK WATER DEPT	P	P				
04	011	NEW BRUNSWICK WATER DEPT	P	E				

### **\*KEY**

#### **Water System Component**

G = Ground Water, P = Purchased Surface Water, S = Surface Water, T = Treatment Plant (EPTDS), U = Ground Water Under The Direct Influence of Surface Water, W = Purchased Ground Water. For a complete definition of each source of drinking water, please refer to the Glossary at the end of this report.

#### **Confinement Status**

C = Confined, U = Unconfined. For a definition of a confined and an unconfined aquifer please refer to the Glossary at the end of this report. K = Unknown, S = Semi-confined. For the purposes of SWAP both K and S were treated as unconfined wells.

#### **Source Status**

C = Recharge, E = Emergency, I = Interim, O = Other, P = Permanent, R = Reserve, S = Seasonal, U = Not in Use/Capped, V = Abandoned/Not Capped, W = Not in Use/Unspecified, X = Not in Use/Mechanical, Y = Not in Use/Contaminated. For a complete definition of each well status category, please refer to the Glossary at the end of this report.

#### **Source**

For ground water sources, the name of the aquifer is provided. For surface water sources, the name of the surface water body on which the intake is located is given.

The Franklin Township Department of Public Works contains 0 EPTDS as illustrated in Table 7 (identified by a "T" in the water system component column). Often public water systems treat source water at the EPTDS to ensure the drinking water provided to the public meets

Federal and State Drinking Water Standards. Please refer to Appendix A- Attachment 5 for information on the public water system's treatment process.

**SECTION VI - SUSCEPTIBILITY RATINGS FOR YOUR DRINKING WATER SOURCE(S)**

## SECTION VI – SUSCEPTIBILITY RATINGS FOR DRINKING WATER SOURCE(S)

Table 8 provides a summary of the susceptibility ratings for the system's source(s). The source column of the table provides the number of ground water and surface water sources and the number of ground water under the direct influence of surface water (GUDI) wells in the system. The other columns provide the total number of source(s) that rated high (H), medium (M), and low (L) for each of the contaminant categories.

**Table 8: Summary of Susceptibility Ratings for Drinking Water Source(s)**

	Pathogens			Nutrients			Pesticides			VOCs			Inorganics			Radionuclides			Radon			DBPs		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 0																								
GUDI - 0																								
Surface water intakes - 0																								

To review a summary of how the other public water systems in the State of New Jersey rated, please refer to Table 5, "Summary of Statewide Susceptibility Ratings for Community Water System Sources (Percent %)" in Section III of the Source Water Assessment Report.

**If a drinking water source's susceptibility is high, it does not necessarily mean the water is contaminated.** High susceptibility is a vulnerability rating, not a factor determining whether or not the water is or is not meeting State and Federal Safe Drinking Water Standards. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. Please refer to the Consumer Confidence Report (CCR) to determine if the drinking water is meeting all of the Safe Drinking Water Act regulatory requirements.

Table 9 illustrates the susceptibility rating for each individual source for each of the contaminant categories.

**Table 9: Susceptibility Rating for Drinking Water Source(s)**

EPTDS ID	Source ID	Source Name	Contaminant Category						
			Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides Radon	DBPs
			Rating	Rating	Rating	Rating	Rating	Rating	Rating

*Franklin Township Department of Public Works purchases all of its drinking water. As a result Table 9 can not be completed since this system does not operate any wells or intakes. Please refer to Table 7 in this report for details on which system(s) Franklin Township Department of Public Works purchases its drinking water from.*

The potential contaminant source inventory and sensitivity variables were used to determine the susceptibility ratings for the sources. For specific information on the water system's potential contaminant source inventory and sensitivity variables, please refer to the Individual Explanatory Variable Inventory and the Specific Potential Contaminant Sources Inventory, Appendix A- Attachment 1 and 2.

SECTION VII - SUSCEPTIBILITY RATINGS FOR YOUR ENTRY POINT TO THE  
DISTRIBUTION SYSTEM (EPTDS)

## SECTION VII – SUSCEPTIBILITY RATINGS FOR ENTRY POINT TO THE DISTRIBUTION SYSTEM (EPTDS)

The Franklin Township Department of Public Works contains 0 EPTDS. The EPTDS and the susceptibility rating for radon and each of the seven-contaminant categories are provided in Table 11. A susceptibility rating was developed for each EPTDS because this rating represents the water that is treated and delivered to the consumer. A majority of the monitoring regulations are established for the point at which the water exits the water treatment facility, therefore the EPTDS susceptibility rating is important in determining the monitoring requirements.

The EPTDS rating was calculated by the following method. The source contribution resulted from multiplying the pumping rate for each water source by each source's susceptibility score (a point value based on the contaminant category scoring system found in Appendix A – Attachment 3). In cases where the pumping rate was not available, the pumping capacity was used. Next, all source contributions were summed and divided by the total capacity (sum of all the pumping rates and/or capacities) for the EPTDS.

$$\frac{\sum \text{Source Contributions (Source Capacity x Source Susceptibility Score Rating)}}{\text{Total Capacity } (\sum \text{ of all source capacities to the EPTDS})} = \text{EPTDS Susceptibility Score}$$

Total Capacity ( $\sum$  of all source capacities to the EPTDS)

### Key

**Source Capacity:** the source capacity used for determining EPTDS ratings was the same as the pumping rate used by New Jersey Geological Survey to create the source water assessment areas. If the pumping rate was not available, the pumping capacity or a default value was used. The pumping rate selection is described in the New Jersey Geological Survey's "Guidance for Well Head Protection Area Delineations in New Jersey", Appendix B- Attachment 1.

**Source Contribution:** the value calculated by multiplying the source's pumping rate by the source's susceptibility score rating. The susceptibility score rating is the point value based on the contaminant category scoring system, which can be found in Appendix A – Attachment 3.

**Source Susceptibility Score Rating:** to obtain a high, medium, or low susceptibility rating, USGS developed a susceptibility scoring system for each contaminant category (pathogens, VOCs, inorganics, nutrients, radionuclides, disinfection byproduct precursors, and pesticides). Each contaminant category has its own point system based on the susceptibility model. For example a susceptibility score range for a contaminant could be 0-5 = low susceptibility, 6-10 = medium susceptibility, and 11-20 = high susceptibility. See Appendices A- Attachment 3 for the susceptibility scoring system USGS used to determine the susceptibility ratings.

**Total Capacity:** is the full amount of water the sources are contributing to the EPTDS. The pumping rates/capacities are summed to determine the total capacity for the EPTDS.

For groundwater sources, only permanent, seasonal, and interim wells were used in the EPTDS rating calculation. Other wells such as emergency, reserve, and not-in-use, were not included in the source to EPTDS "roll-up", but these wells were rated on a source basis.

For public water systems that consist of a combination of well(s) and intake(s), the EPTDS received a ground water EPTDS rating and a surface water EPTDS rating. Even in circumstances where the surface water is blended with ground water, the EPTDS received two separate susceptibility ratings. A separate ETPDS rating is provided for the ground water and the surface water because separate susceptibility models were developed for ground and surface water. Ground water and surface water susceptibility models differ in susceptibility rating score, therefore, the rating results are not on the same scale.

If a facility has only one well or intake contributing to the EPTDS, that EPTDS received the same rating as the well or intake. DEP used the equation below to determine an EPTDS susceptibility rating.

Table 10 provides an example of how the EPTDS ratings were calculated. To review how the EPTDS ratings were calculated for the Franklin Township Department of Public Works, please refer to Appendix A- Attachment 4.

**Table 10: Example of an EPTDS Susceptibility Rating Calculation**  
EPTDS 01

Source	Capacity (MGD)	Source Susceptibility Score Rating (0-20, low to high)	Total = Source Contribution
Well 1	1.09	20	$(1.09 \times 20) = 21.8$
Well 2	1.72	10	17.2
Well 3	0.72	5	3.6
Well 4	1.48	10	14.8
Well 5	0.75	20	15.0
Total Capacity	5.76		72.4
EPTDS Susceptibility Score is $72.4 / 5.76 = 12.6$			

For the above example, the sum of the source contributions for EPTDS 01 (72.4) is divided by the total capacity from all sources (5.76) giving a susceptibility score for the EPTDS of 12.6. The original range for rating sources was 0-5 low, 6-10 medium, 11-20 high. EPTDS 01 susceptibility rating was 12.6; therefore the EPTDS would receive a high rating.



Table 11 lists the susceptibility ratings for each EPTDS for the Franklin Township Department of Public Works.

**Table 11: Susceptibility Rating for EPTDS**

Table 1: Susceptibility Rating for EPTDS									
EPTDS ID	EPTDS Name	Contaminant Category							
		Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
		Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating

*Franklin Township Department of Public Works purchases all of its drinking water. As a result Table 11 can not be completed since this system does not operate any EPTDS. Please refer to Table 7 in this report for details on which system(s) Franklin Township Department of Public Works purchases its drinking water from.*

**SECTION IV - GENERAL DESCRIPTION OF YOUR WATER SYSTEM**

#### SECTION IV – DESCRIPTION OF WATER SYSTEM

New Brunswick Water Department  
PWID # 1214001

78 Bayard Street, PO Box 546  
New Brunswick, NJ 08903  
(732)745-5060

New Brunswick Water Department is a public community water system consisting of

1 Entry Points to the Distribution System (EPTDS)

0 wells

0 wells under the influence of surface water

2 surface water intake(s)

3 purchased ground water

0 purchased surface water

Table 6 below contains the municipalities and the population within each of these municipalities served by New Brunswick Water Department.

**Table 6: Municipalities and Population Served**

<b>Municipality</b>	<b>County</b>	<b>Population Served - 2003</b>
Milltown Boro	Middlesex	
New Brunswick City	Middlesex	
Franklin Twp.	Somerset	

SECTION IV - GENERAL DESCRIPTION OF YOUR WATER SYSTEM

#### SECTION IV – DESCRIPTION OF WATER SYSTEM

South Brunswick Township Water Division  
PWID # 1221004

PO Box 190  
Monmouth Junction, NJ 08852  
(732)329-4000

South Brunswick Township Water Division is a public community water system consisting of

**3 Entry Points to the Distribution System (EPTDS)**

- 3 wells
- 0 wells under the influence of surface water
- 0 surface water intake(s)
- 2 purchased ground water
- 2 purchased surface water

Table 6 below contains the municipalities and the population within each of these municipalities served by South Brunswick Township Water Division.

**Table 6: Municipalities and Population Served**

<b>Municipality</b>	<b>County</b>	<b>Population Served - 2003</b>
South Brunswick Twp.	Middlesex	38500
Franklin Twp.	Somerset	1

SECTION V - INVENTORY OF TREATMENT PLANTS AND DRINKING WATER SOURCES

## SECTION V - SYSTEM INVENTORY FOR: South Brunswick Township Water Division

Table 7 provides the South Brunswick Township Water Division's treatment plant(s); source(s); the sources' location(s); whether the source(s) are ground water, surface water, or a purchased supply; and the sources' capacity(s). The first column contains the EPTDS ID and sources contributing to the same EPTDS are identified by the same number. An EPTDS is the entry point to the distribution system, and for most community water systems this location is after the water is treated at a treatment plant.

In the case of a ground water source, the well's confinement status and well permit number are provided.

**Table 7: Drinking Water Source and EPTDS Inventory**

EPTDS ID	Source ID	Source Name	Water System Component *	Source Status *	Source *	Source Capacity (MGD)	Well Permit #	Confinement Status *
01	002	JAMESBURG RD WTP BLOCK 31 LOT	T	P				
01	003	JAMES BURG RD WELL 11	G	P	middle Potomac-Raritan-Magothy aquifer	1.584	28-04910	U
03	007	GEORGES RD WTP BLOCK 12 LOT 1.	T	P				
03	008	GEORGES RD WELL 13	G	P	middle Potomac-Raritan-Magothy aquifer	0.8726	28-07187	U
05	012	BROADWAY RD WTP BLOCK 1 LOT 15	T	P				
05	013	BROADWAY RD WELL 15	G	P	middle Potomac-Raritan-Magothy aquifer	1.908	28-10991	U
11	020	MONROE TOWNSHIP MUA	W	E				
12	023	NORTH BRUNSWICK W D	P	E				
14	026	ELIZABETHTOWN W C	W	P				
15	029	EAST BRUNSWICK WATER DEPARTMENT	P	E				

**\*KEY**

**Water System Component**

G = Ground Water, P = Purchased Surface Water, S = Surface Water, T = Treatment Plant (EPTDS), U = Ground Water Under The Direct Influence of Surface Water, W = Purchased Ground Water. For a complete definition of each source of drinking water, please refer to the Glossary at the end of this report.

**Confinement Status**

C = Confined, U = Unconfined. For a definition of a confined and an unconfined aquifer please refer to the Glossary at the end of this report. K = Unknown, S = Semi-confined. For the purposes of SWAP both K and S were treated as unconfined wells.

**Source Status**

C = Recharge, E = Emergency, I = Interim, O = Other, P = Permanent, R = Reserve, S = Seasonal, U = Not in Use/Capped, V = Abandoned/Not Capped, W = Not in Use/Unspecified, X = Not in Use/Mechanical, Y = Not in Use/Contaminated. For a complete definition of each well status category, please refer to the Glossary at the end of this report.

**Source**

For ground water sources, the name of the aquifer is provided. For surface water sources, the name of the surface water body on which the intake is located is given.

The South Brunswick Township Water Division contains 3 EPTDS as illustrated in Table 7 (identified by a "T" in the water system component column). Often public water systems treat source water at the EPTDS to ensure the drinking water provided to the public meets Federal and State Drinking Water Standards. Please refer to Appendix A- Attachment 5 for information on the public water system's treatment process.



SECTION VI - SUSCEPTIBILITY RATINGS FOR YOUR DRINKING WATER SOURCE(S)

## SECTION VI – SUSCEPTIBILITY RATINGS FOR DRINKING WATER SOURCE(S)

Table 8 provides a summary of the susceptibility ratings for the system's source(s). The source column of the table provides the number of ground water and surface water sources and the number of ground water under the direct influence of surface water (GUDI) wells in the system. The other columns provide the total number of source(s) that rated high (H), medium (M), and low (L) for each of the contaminant categories.

**Table 8: Summary of Susceptibility Ratings for Drinking Water Source(s)**

	Pathogens			Nutrients			Pesticides			VOCs			Inorganics			Radionuclides			Radon			DBPs			
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	
Wells - 3		1	2	2	1			2	1	3				2	1	3				3			2	1	
GUDI - 0																									
Surface water intakes - 0																									

To review a summary of how the other public water systems in the State of New Jersey rated, please refer to Table 5, "Summary of Statewide Susceptibility Ratings for Community Water System Sources (Percent %)" in Section III of the Source Water Assessment Report.

**If a drinking water source's susceptibility is high, it does not necessarily mean the water is contaminated.** High susceptibility is a vulnerability rating, not a factor determining whether or not the water is or is not meeting State and Federal Safe Drinking Water Standards. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. Please refer to the Consumer Confidence Report (CCR) to determine if the drinking water is meeting all of the Safe Drinking Water Act regulatory requirements.

Table 9 illustrates the susceptibility rating for each individual source for each of the contaminant categories.

**Table 9: Susceptibility Rating for Drinking Water Source(s)**

EPTDS ID	Source ID	Source Name	Contaminant Category							
			Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
			Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating
01	003	JAMES BURG RD WELL 11	L	H	M	H	M	H	M	H
03	008	GEORGES RD WELL 13	L	H	M	H	M	H	M	H
05	013	BROADWAY RD WELL 15	M	M	L	H	L	H	M	M

The potential contaminant source inventory and sensitivity variables were used to determine the susceptibility ratings for the sources. For specific information on the water system's potential contaminant source inventory and sensitivity variables, please refer to the Individual Explanatory Variable Inventory and the Specific Potential Contaminant Sources Inventory, Appendix A- Attachment 1 and 2.

**SECTION VII - SUSCEPTIBILITY RATINGS FOR YOUR ENTRY POINT TO THE  
DISTRIBUTION SYSTEM (EPTDS)**

## SECTION VII – SUSCEPTIBILITY RATINGS FOR ENTRY POINT TO THE DISTRIBUTION SYSTEM (EPTDS)

The South Brunswick Township Water Division contains 3 EPTDS. The EPTDS and the susceptibility rating for radon and each of the seven-contaminant categories are provided in Table 11. A susceptibility rating was developed for each EPTDS because this rating represents the water that is treated and delivered to the consumer. A majority of the monitoring regulations are established for the point at which the water exits the water treatment facility, therefore the EPTDS susceptibility rating is important in determining the monitoring requirements.

The EPTDS rating was calculated by the following method. The source contribution resulted from multiplying the pumping rate for each water source by each source's susceptibility score (a point value based on the contaminant category scoring system found in Appendix A – Attachment 3). In cases where the pumping rate was not available, the pumping capacity was used. Next, all source contributions were summed and divided by the total capacity (sum of all the pumping rates and/or capacities) for the EPTDS.

$$\frac{\sum \text{Source Contributions (Source Capacity x Source Susceptibility Score Rating)}}{\text{Total Capacity (\sum of all source capacities to the EPTDS)}} = \text{EPTDS Susceptibility Score}$$

Total Capacity ( $\sum$  of all source capacities to the EPTDS)

### Key

**Source Capacity:** the source capacity used for determining EPTDS ratings was the same as the pumping rate used by New Jersey Geological Survey to create the source water assessment areas. If the pumping rate was not available, the pumping capacity or a default value was used. The pumping rate selection is described in the New Jersey Geological Survey's "Guidance for Well Head Protection Area Delineations in New Jersey", Appendix B- Attachment 1.

**Source Contribution:** the value calculated by multiplying the source's pumping rate by the source's susceptibility score rating. The susceptibility score rating is the point value based on the contaminant category scoring system, which can be found in Appendix A – Attachment 3.

**Source Susceptibility Score Rating:** to obtain a high, medium, or low susceptibility rating, USGS developed a susceptibility scoring system for each contaminant category (pathogens, VOCs, inorganics, nutrients, radionuclides, disinfection byproduct precursors, and pesticides). Each contaminant category has its own point system based on the susceptibility model. For example a susceptibility score range for a contaminant could be 0-5 = low susceptibility, 6-10 = medium susceptibility, and 11-20 = high susceptibility. See Appendices A- Attachment 3 for the susceptibility scoring system USGS used to determine the susceptibility ratings.

**Total Capacity:** is the full amount of water the sources are contributing to the EPTDS. The pumping rates/capacities are summed to determine the total capacity for the EPTDS.

For groundwater sources, only permanent, seasonal, and interim wells were used in the EPTDS rating calculation. Other wells such as emergency, reserve, and not-in-use, were not included in the source to EPTDS "roll-up", but these wells were rated on a source basis.

For public water systems that consist of a combination of well(s) and intake(s), the EPTDS received a ground water EPTDS rating and a surface water EPTDS rating. Even in circumstances where the surface water is blended with ground water, the EPTDS received two separate susceptibility ratings. A separate ETPDS rating is provided for the ground water and the surface water because separate susceptibility models were developed for ground and surface water. Ground water and surface water susceptibility models differ in susceptibility rating score, therefore, the rating results are not on the same scale.

If a facility has only one well or intake contributing to the EPTDS, that EPTDS received the same rating as the well or intake. DEP used the equation below to determine an EPTDS susceptibility rating.

Table 10 provides an example of how the EPTDS ratings were calculated. To review how the EPTDS ratings were calculated for the South Brunswick Township Water Division, please refer to Appendix A- Attachment 4.

**Table 10: Example of an EPTDS Susceptibility Rating Calculation**  
EPTDS 01

Source	Capacity (MGD)	Source Susceptibility Score Rating (0-20, low to high)	Total = Source Contribution
Well 1	1.09	20	(1.09*20) = 21.8
Well 2	1.72	10	17.2
Well 3	0.72	5	3.6
Well 4	1.48	10	14.8
Well 5	0.75	20	15.0
Total Capacity	5.76		72.4
EPTDS Susceptibility Score is $72.4 / 5.76 = 12.6$			

For the above example, the sum of the source contributions for EPTDS 01 (72.4) is divided by the total capacity from all sources (5.76) giving a susceptibility score for the EPTDS of 12.6. The original range for rating sources was 0-5 low, 6-10 medium, 11-20 high. EPTDS 01 susceptibility rating was 12.6; therefore the EPTDS would receive a high rating.

Table 11 lists the susceptibility ratings for each EPTDS for the South Brunswick Township Water Division.

**Table 11: Susceptibility Rating for EPTDS**

EPTDS ID	EPTDS Name	Contaminant Category							
		Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
		Rating	Rating	Rating	Rating	Rating	Rating		Rating
01	JAMESBURG RD WTP BLOCK 31 LOT	L	H	M	H	M	H	M	H
03	GEORGES RD WTP BLOCK 12 LOT 1	L	H	M	H	H	H	M	H
05	BROADWAY RD WTP BLOCK 1 LOT 15	M	M	L	H	L	H	M	M

ATTACHMENT O





# State of New Jersey

Christine Todd Whitman  
Governor

Department of Environmental Protection

Robert C. Shinn, J.  
Commissioner

## MEMORANDUM

TO: Rick Kropp, Bureau Chief  
Bureau of Water Allocation  
Water Supply Element

FROM: Stephen Maybury, Bureau Chief  
Bureau of Environmental Evaluation  
and Cleanup Responsibility Assessment

SUBJECT: Well Restriction Area (WRA)

SEP 13 1996

A WRA has been established in Franklin Township, Somerset County. The affected block 517.02 and lot 20.01 is shown on the attached 1996 tax map. The area of the CEA is also shown on the attached map.

The point of contact for all questions concerning the delineation of the WRA is Mark R. Souders, Bureau of Environmental Evaluation and Cleanup Responsibility Assessment (BEECRA).

Caution should be exercised if any types of wells are constructed within the boundaries of the CEA. Limitations on construction may include, without limitation: double-casing of all wells to avoid cross-contamination with deeper water-bearing zones; avoid breaching of confining units (aquitards); evaluation of the new well and existing nearby wells to determine whether treatment is required for ground water extracted from the new well; actual treatment of the new well and installation of deeper wells to avoid the contaminated water-bearing zone.

0

**ATTACHMENT P**

October 4, 2010

# **NJ American Water Company – Elizabethtown**

$$\frac{\text{Total Population Served}}{\text{Total \# of Wells}} = \frac{60,944}{73} = 835 = A$$

## **South Brunswick Twp**

$$\frac{\text{Total Population Served}}{\text{Total \# of Wells}} = \frac{38,501}{3} = 12,834 = B$$

## **Franklin Twp**

$$\frac{\text{Total Population Served}}{\text{Total \# of Wells}} = \frac{50,000}{0} = 0 = C$$

1) Number of wells for each provider by distance from site:

Distance From Site	NJAW- Elizabethtown	Middlesex Water Co.	Franklin Twp DPW
0 – ¼	0	0	0
> ¼ – ½	0	0	0
> ½ - 1	0	0	0
> 1 - 2	0	0	0
> 2 - 3	2	0	0
> 3 - 4	2	0	0

2) Population utilizing wells by distance from site:

Distance From Site	NJAW- Elizabethtown	So. Brunswick Twp	Franklin Twp DPW	Total Population For Each Distance
	A x (# of Wells)	B x (# of Wells)	C x (# of Wells)	A(# of Wells) + B(# of Wells) + C(# of Wells)
0 – ¼	0	0	0	0
> ¼ – ½	0	0	0	0
> ½ - 1	0	0	0	0
> 1 - 2	0	0	0	0
> 2 - 3	835 x 2	0	0	1,670
> 3 - 4	835 x 2	0	0	1,670
				3,340

NJDEP/BEMSA

P